SHIPPING WORLD



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25 JANUARY 1961

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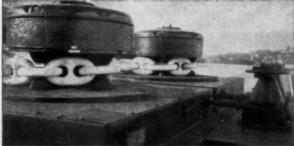
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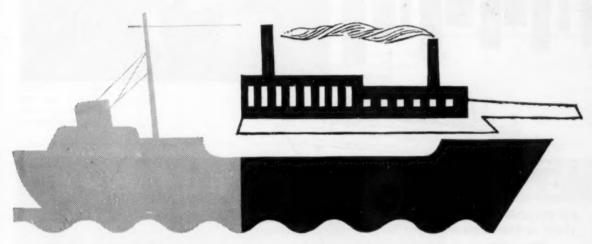


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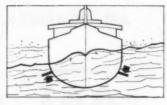
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THE SHIPPING WORLD

DOCK STRIKE DAMAGE

THE LONDON Chamber of Commerce has for years been perturbed over the number of dock strikes in the Port of London, and the recent unofficial strike of tally clerks caused such heavy losses and damage to Britain's export drive that the chamber has issued an interim report dealing with its effects. While it deals with one particular, if especially prolonged, stoppage at a major port, the effects of any strike in any port are widespread and costly. Each strike may be news while it lasts; but when the men go back to work the public is quick to forget, and the strikers themselves are only too ready to ignore the wounds suffered by commerce and industry, and in fact by the whole national economy.

It is not possible to give even an approximate valuation to the total damage done by the unofficial strike of some 1,500 London tally clerks, but a few figures may suggest the scale. For example, 196 vessels were diverted to Continental and other ports and 125 sailed without working or incompletely laden or discharged; and the cost of a ship lying in port may be between £250 and £350 a day. The Port of London Authority lost £400,000 in port dues alone. Figures supplied by 32 shipping companies to the London General Shipowners' Society recorded a loss of £1,300,000, and these companies represented not more than a quarter of the total membership. The cost of the strike to a firm importing grain was £20,000, to a timber importer £12,000 and a meat importer £12,000. One manufacturer reports £20,000 lost turnover he will never catch up; another £10,000; a third lost a whole year's business with a big customer. These are a few examples. Even so the financial loss is in the long term less serious than the damage done to Britain's reputation in overseas markets.

While these direct losses reduce the competitive strength of Britain's export drive and damage the health of the economy, the indirect damage can be even more serious. Delay in delivery means lost exports, at a time when every effort must be made to increase them. What is worse, it means lost customers, and the Chamber's report cites several cases in which this has been proved to be the case. And foreign competitors are not slow to profit from the embarrassment caused to British exporters by these strikes. Unless goods can pass freely, expeditiously, economically and with assurance through the country's ports, Britain cannot have a thriving and expanding economy, or even maintain, let alone improve, its standard of living. Yet port users see no evidence, according to the London Chamber, that either the public or the Government have treated successive interruptions and delays in port working as a question of the highest priority demanding emergency action. It is to be noted that the Chamber's publication is described as an interim report, so that presumably a further report is being prepared, which, it is to be expected, will contain some firm proposals for positive action to combat unofficial strikes in the port industry. As the interim report concludes, "to await the next occasion with indifference is to court disaster."

Current Events

Independent Investment in Aviation

BRITISH UNITED AIRWAYS, formed last July by the amalgamation of 37 independent air transport companies, under the joint wings of the Airwork group and Hunting-Clan, and backed by large shipping interests, has now revealed its intention to invest something like £20 mn in jet aircraft. It is now cheaper to fly passengers in the latest types of jet aircraft, instead of, as hitherto, in the older and obsolescent ones, but to be operated on an economic basis the new jet aircraft must be fully occupied. It is therefore essential to have a carefully planned route network, offering possibilities of full utilisation. British United Airways have drawn up such a schedule, planned to obtain maximum potential utilisation for a minimum fleet of four long-range jet aircraft such as the Vickers VC-10 and five short-range jet aircraft such as the DH Trident. This proposal has now been submitted to the Air Transport Licensing Board under the terms of the new Civil Aviation Act, and it remains to be seen how much or how effective the opposition will be from the two State-owned air corporations, BOAC and BEA. British United Airways have stated that it has applied to the Board for permission to operate the smallest number of scheduled services necessary to safeguard the investment it is prepared to make in new British jets. The airline emphasises that the granting of these applications would have "no effect whatever" on the existing opera-tions of the two Corporations. If British United is given permission to operate the network applied for, it will only represent 20 per cent of the Corporation's estimated passenger traffic increase for the years 1961-65. While British United Airways awaits a decision on these applications, it is proceeding with plans to build a new flight shed at Gatwick, together with an additional four-storey administration block, and to consolidate its operational headquarters there. Thus it is better able to serve the 15 mn residents of the Southern Counties for whom Gatwick is the most convenient of London's airports. Until negotiations with manufacturers of jet aircraft are finalised and deliveries can be made, British United intends to use Britannias on its East and Central Africa Safari services. Viscounts will meanwhile continue to be operated on its routes to West Africa, the Canary Islands, Gibraltar and the Channel Islands.

Combined Tender for Cunard Liner

It was an astute move of the two Tyneside yards capable of building the new Cunard Liner to combine and submit a joint bid for the order. The firms, Vickers-Armstrongs (Shipbuilders) Ltd and Swan, Hunter & Wigham Richardson Ltd, are forming a joint company-Vickers & Swan Hunter Ltd-in which each will have a 50 per cent interest, and which will submit the tender. If this is successful, the hull of the new ship will be built at the Wallsend yard of Swan, Hunter & Wigham Richardson, while the fitting out will be done by Vickers-Armstrongs. This division is a wise one, as it allows Swan Hunters to employ their recently modernised steel fabricating facilities, which are probably the best in the country. Vickers-Armstrongs most modern steel fabricating facilities are at the firm's Barrow shipyard, where the new Orient liner Oriana has just been completed, but the lock through which ships must pass to reach the open sea from Barrow is not large enough to allow a vessel of 75,000 tons gross to be built there. The announcement gave no indication as to which firm would build the propelling machinery. Either of the two is well capable of doing so, Swan Hunters at its subsidiary, The Wallsend Slipway & Engineering Co Ltd, and Vickers-Armstrongs at its Barrow engine works. If the latter were chosen, it would spread the work between two of the country's shipbuilding districts, and this could be a political factor of importance.

Production Research Head of B.S.R.A.

ONE of the points emphasised in the D.S.I.R. report was the need for the shipbuilding industry to increase its research effort on the production side, and it welcomed the decision to set up an organisation covering this field. One of the first steps towards the initiation of this organisation was taken last week with the appointment of Mr P. G. Hodgkinson as head of the Production and Operational Research section of the British Shipbuilding Research Association. This section is, of course, a new one which is being set up to undertake the work mentioned. It is as yet too early to say much about the lines along which it will proceed, but it is understood that it will concentrate in the first place on ship construction rather than the manufacture of machinery-the phrase "ship construction" including fitting out as well as steel fabrication. The choice of Mr Hodgkinson for the post is an interesting one, as his background is one of aircraft engineering, and he has come to his new appointment from the position of chief production engineer of the de Havilland Aircraft Co Ltd. However it is clear that what was wanted was not so much someone with knowledge of shipbuilding as someone with experience of production research techniques; while the background of another industry ensures a fresh approach.

New Wage Structure Proposed

THE NEED for a new approach to the construction of ships has been stressed repeatedly in Scotland and has resulted in proposals being advanced by Personnel Administration Ltd, Glasgow business consultants who have done a considerable amount of work in management education in this industry. Mr Alan Beaton, director of the firm, is placing proposals for a new wage structure for the industry before unions and employers. The plan has already been advanced to leaders in the industry and there is a prospect that some support will be offered

to this approach, which is unofficial and has not, so far, received either support or approval from the organisations within the industry, on either side. Mr N. A. McCrae, a director of Alexander Stephen & Sons Ltd, has indicated the situation in a message to employees at that yard. New methods, new machines and a new approach to their use are necessary to achieve peak efficiency in shipbuilding, he states. As these methods and machines are proved in use, they should result in more work being made available for more workers. Demarcation disputes are criticised; new orders depend on work being completed on time and within the delivery and constructional planning periods. The industry is facing a critical period when new business will be difficult to obtain, and as new business is based on existing work, the necessity exists to start now to plan for the building of cheaper ships in less time. Captain N. J. H. D'Arcy, engineering director, reports that the firm plans to extend two bays of the engineering shop to improve heavy machining capacity. One of the new machines will mill and bore steelwork up to 41ft long and 17ft 6in high. This latest proposal is in line with recent development at this yard, where the plating and fabrication sections have been still further improved in recent months.

Higher Price for Standard Ships

THE PURCHASE by a Hong Kong firm of the Blue Funnel Line Liberty-type cargo steamer Euryades, for what is reported to amount to "about £120,000," marks another stage in the upward movement of the standard type tonnage. If this reported price is correct, and the circumstances would seem to suggest that it very likely is, this transaction ranks as the highest price deal for this class of tonnage for some considerable time. The highest price for such a ship during 1960 would seem to have been the Mastro Stelios (SW. 13.4.60) to Chinese Communist buyers for £117,500, but the reasons for that high priced deal, at a time when standard ship prices were in general very much lower, was bound up with the fact that she gave delivery at Shanghai, which involved the sellers in addition repatriation costs. For these reasons the Mastro Stelios sale could hardly be regarded as representative of the actual level of the market. The current transaction, however, involving the Euryades, can be linked clearly with a rather better freight market tendency, and with the fact that she passed survey just a year ago. She is a Bethlehem-built vessel, and the price paid is fully justified when one compares the figure of close on £100,000 paid for the City of Doncaster recently with survey due. The City of Doncaster is also a Bethlehem-built vessel, and the differential for a goodclass liner-company maintained standard type steamer as against the more run-of-the-mill standard ships is stressed by the transactions also reported in this issue, involving the Fort-type steamers Fotoulia and Sunjarv. The Fotoulia has been sold to Far Eastern buyers for £72,500 with survey due, and the Sunjary has realised £73,000 in a sale to London Greeks.

Club Influence

Publication this week of the new edition of The Shipping World Year Book & Who's Who sheds a small flash of light on an aspect of the shipping industry that is at once vital to its operation, historically interesting, practically unknown outside the ranks of the industry, and within the industry largely taken for granted and kept astonishingly free from the realm of controversy although involving, at least by implication, vast sums of money. Ask any member of the general public what he knows of the shipowners' clubs and the chances are he will suppose you are referring to some sort of Bootles of Bishopsgate or St James's of St Mary Axe where ship-

owners dine, wine, discuss momentous issues and tell funny stories. Schemes of mutual insurance are familiar in other industries, but nowhere do they go back so far or spread so wide as in shipping. The clubs gave the original spur to cooperation within the industry and they still provide the link through which the Chamber of Shipping, for instance, draws its wide membership and support. The term "club" with its present-day social connotation, is not quite so odd as it might seem; because there is a stronger element of loyalty attaching to the mutual clubs among owners than to their purely commercial associations, hull underwriters included. In recognition of this there is a corresponding absence of jockeying and competition for membership among the clubs, and a strong sense of tradition marked in several cases by a long family connection in the firms acting as managers. The brief directory of "Shipowners' Mutual Clubs," which forms a new feature of The Shipping World Year Book, contains only 34 titles, but the combined tonnage membership entered in the P & I associations comes to over 921 mn grt, of which over 60 mn tons are entered in British clubs.

New P & O Ships for Extended Far East Service

THE TWO passenger-cargo liners recently purchased by the P & O Steam Navigation Company from the Cie. Maritime Belge, Jadotville and Baudouinville, are to operate on an important extension of the P & O-Orient Lines Far Eastern Mail service. As forecast, they will replace Carthage and Corfu, both built in 1931, which will be withdrawn from service on their arrival in London on February 13 and April 9 respectively. Jadotville, to be renamed Chitral, and Baudouinville, to be renamed Cathay, together with Canton, will operate P & O-Orient Lines' mail service from the United Kingdom to Malaya and the Far East, which will now extend beyond Hong Kong to Japan. The names chosen for the new ships were previously held by sister ships of Carthage and Corfu. Cathay was sunk in 1942, and Chitral scrapped in 1953. The new Chitral will commence her first voyage for P & O-Orient Lines on February 28 when she leaves London for the Far East. The Cathay's first sailing from London will be on April 12. Both will call at When the sailings of the two new ships Southampton. are fully integrated in the schedules, they and P & O cargo liners will offer a regular U.K.-Japan-U.K. service once every calendar month. Chitral and Cathay will each carry approximately 240 passengers in first class only. The tourist-class trade which was covered by the two-class Carthage and Corfu will be carried in other ships of P & O-Orient Lines, either homeward bound from the Pacific or calling at Bombay en route to and from Australia.

Refusal to Limit Liability

STRONG WORDS about Liberty vessels and flags of convenience were used by the United States Court in the case of Theogennitor v Nordholm, arising out of a collision between the two vessels in the Mississippi River. The Nordholm was rammed by the sheering of the heavily laden Theogennitor while the former vessel was overtaking, both vessels alleging that the collision was due to the fault of the other, the question of the right to limit liability also being involved. The Nordholm was a comparatively new Danish cargo ship, whereas the Theogennitor was a war-time built Liberty ship operating under the Panamanian flag. The evidence disclosed that the latter vessel was loaded to the gunwales and, if she was not overloaded, she was, said the Court, on the ragged edge. On the question of her horsepower the Court said that "many of her horses had long gone to pasture" and that under the circumstances it was understandable that the current took over her navigation. For this vessel to allege fault on the part of the Nordholm was, the Court commented, a brazen attempt to cover up her own shortcomings which, the Court found, included unlicensed officers. The letting go of the vessel's starboard anchor might have avoided the accident, but it was found that this was not let go because of negligence, because the crew, and particularly certain officers, were not properly trained to perform their duties as seamen. In finding that the collision was caused through the sole fault of the Panamanian vessel and in refusing the owner the right to limit liability, the Court said that it was time that Admiralty Courts protected responsible shipping against old and underpowered, "shadowy owned" tramps, flying the flag of any nation, and manned by the flotsam of the world.

Safety Precautions

To the Editor, THE SHIPPING WORLD.

SIR,—In your issue of 11 January 1961 there is an article entitled "Molasses by Tanker" by Mr Clarke. He writes that:

"Due to a persistent depression in the shipping industry, with few cargo movements and correspondingly low freight rates, shipowners were being faced with the problem of either obtaining cargoes to suit their ships; or adapting them to carry cargoes which were available and could show slight profits, or at least break even."

If this trend in shipping is going to persist I think there is a good chance that shipowners may alter ships without giving due regard to the safety precautions that go with different cargoes. I think this point is of great importance and all shipowners should take note.

Yours, etc,

CHRISTOPHER R. ELLIOTT,

Editor, Fire Protection Review.

154 Fleet Street, London EC4. 18 January 1961.

British Container Ship Services

To the Editor, THE SHIPPING WORLD.

SIR,-We have perused the article in THE SHIPPING WORLD of II January 1961 under the heading "British Container Ship Services". We were not consulted before its publication and rather surprised to note in the list of services that two vessels only of the Associated Humber Lines' fleet of 12 were included, namely m.v. Wakefield and m.v. York.

This statement must obviously leave your readers in some doubt as to how services from the Humber to eight Continental ports can be operated with only two vessels and it would no doubt be of interest to them to learn that the Associated Humber Lines have long been engaged in and operate a modern fleet of motor vessels on short sea trading routes to the Continent from River Humber ports. The fleet has progressively entered service during the last six years with the development of container and palletised traffic in mind.

Hull-Rotterdam—m.v. Bolton Abbey and Melrose Abbey.

Passenger cargo vessels of 1,300 nrt, designed also for carriage of containers and palletised cargo.

Goole-Copenhagen-Refrigerated vessels Kirkham Abbey and Byland Abbey, also capable of carrying containers.

Goole - Bremen - Hamburg - Rotterdam - Amsterdam - Antwerp -

Eight general cargo vessels, designed also for the carriage of container traffic, namely m.v. Whitby Abbey, Fountains Abbey, Wakefield, Leeds, York, Harrogate, Darlington and Selby.

> Yours, etc, G. W. HILL,

Superintendent Marine Engineer, Associated Humber Lines Ltd.

Myton Bridge, 14 January 1961.

ON THE "BALTIC"

DEVELOPMENTS IN THE GRAIN TRADES

By BALTRADER

It is probably true to say that the Earth has never failed to produce harvests in abundance in some part of the world, although it is nothing new for very large areas to be devastated by floods or droughts. At present the country most hard hit by the failure of the crops is China, which has suffered disastrously in the past year from floods, droughts and blights, perhaps aggravated by the diversion of labour to the production of steel. A great river like the Yangtse crosses the plains at a height above the surrounding land, with obvious danger to the population in case of flood. To divert surplus waters to land in need of irrigation, work on a vast scale is said to be planned, even with the use of atomic power. Meanwhile, the vital object of the Chinese Government is to import food in large quantities as quickly as possible.

This sudden demand comes after Australia has had a fine harvest, and it was recently announced that 300,000 tons of wheat from there had been sold to China for delivery in the first three months of the year. A Chinese delegation to Canada to buy grain has also been reported, but the price of Australian wheat is more favourable than Canadian, which leads to the expectation that China will import much more than the first published amount of Australian wheat. Australia has a surplus of 4 mn tons of wheat to export; the United Kingdom usually takes about a million, and Italy, Spain and other Mediterranean countries a few hundred thousands, but there should be plenty to spare for China's requirements. The first few weeks of this year have seen extraordinary activity on the London charter market for tonnage on timecharter, much of it with delivery in the Far East and intended for carriage of grain to China; many large vessels have also been fixed to load wheat in Australia for Chinese ports of discharge, one of them being of 19,500 tons capacity, the largest ever chartered from Australia.

Trans-Atlantic Prospects

Europe has not entirely escaped the spoiling of her crops and harvests through continuous rain. The result has been that much of the wheat harvested in Britain and elsewhere was fit only for cattle feed. Later the waterlogged ground has been unfit for winter sowing, which may affect the harvest to some extent this year unless re-sowing in the spring is well favoured by the weather. The large surplus of North American and Australian wheat will probably continue to be in demand to make good deficiencies on this side. It is in fact a matter of surprise that the trans-Atlantic chartering market has lately been only moderately active for grain from North America, although many ships have recently been taken for grain from Australia to Europe mainly to Britain, at higher rates than in former months, although the latest show a slight decline.

Tankers Disappoint

There is disappointment that the recent important improvement in rates of freight for tankers in the oil trade has petered out. It was hoped that tankers might be absorbed in the service for which they were built and not continue to be drawn into the grain trade in large numbers, to the detriment of the owners of dry-cargo vessels. The sale contracts of wheat to the United Kingdom exclude carriage by tanker, but a large proportion of grain

imported to the Continent arrives in that class of vessel at a lower rate of freight than the average grain carrier can well afford to accept. Large bulk carriers also are making their appearance on the grain market with the some result of lowering the current rate on routes where the ports and facilities are suitable for their size. On the whole, however, there appear to be prospects of steady markets in the coming months and it is noticeable that the price of secondhand war-built vessels is tending to rise, partly on the initiative of Greek buyers, who usually have a keen scent for a promising bargain. There are, of course, factors of an unpredictable kind which may swing rates of freight one way or the other.

For instance one does not know what policies may be adopted by the new President of the U.S.A. These may stimulate or may check expansion, but it seems the more likely that a spirit of optimism will be encouraged by a change of administration at a time when trade has faltered.

The Freight Markets

There has been a fair amount of chartering in the trans-Atlantic trade and although rates of freight have not improved there is a steady undertone in that market. The River Plate has been firm with better rates paid than for many months. The North Pacific has been more active at steady rates. There has been a quiet week in the Australian market both homewards and for discharge in China after the activity of the previous week. Time charters have continued to be arranged by the Chinese charterers and by the liner companies.

Fixtures include: Hampton Roads to Japan, 13,000 tons \$8.45, March/April and similar business for 19,500 tons at \$8.10, January/February; Reynolds, 9/9,800 tons wheat U.S. Gulf to picked ports U.K. 53s 9d, February 11/20; U.S. Gulf to Poland, 19,000 tons wheat \$6.20, 1,300 tons discharge free, February 7/17; U.S. Gulf to West Italy, heavy grain, \$6, February/March, also similar business at \$7; Cuba to South China, sugar, 92s 6d, Shanghai 93s 6d, North China 94s 6d, January/February; Cuba to Black Sea, sugar 60s, f.i.o. and free taxes; British Columbia to three ports Newcastle-Adelaide range 9,500 tons, 499,000 cu ft bale, \$115,000, timber and general cargo, March 10/ April 10, Chinese charterers; British Columbia to Antwerp-Hamburg range, 1,400 tons wheat, 63s 6d, February 5/23 (subject approval); British Columbia to two ports East Coast U.K., 11,500 tons, 75s, option Antwerp, Rotterdam or Amsterdam \$8, February 10/28; British Columbia or U.S. North Pacific, 13,500 tons wheat, \$6.50, March; U.S. North Pacific to Karachi, 16,000 tons wheat, \$9.20, February; River Plate (full loading options) to Genoa, Leghorn or Naples 70s, 54ft guaranteed, maximum 1,000 tons bagged cargo, option Portugal 63s 9d wheat only or Spanish Mediterranean or Atlantic 65s, February 24/ March 15; Merwede, 9,440 dwt, $11\frac{1}{2}/12$ knots on $11\frac{1}{2}$ tons diesel, 20s, West African round, delivery London, February 2/10; Cape York, 10,250 dwt, 582,000 cu ft bale, 13½ knots on 18 tons fuel and 1 ton diesel, 20s, one West Coast South American round, delivery Immingham, February 10/18, Capetan Nicolas, 12,800 dwt, 605,000 cu ft bale, 14 knots on 21 tons fuel and 11/2 tons diesel, 22s 6d, 7/10 months, delivery China February. Aghios Spyridon, 14,452 dwt, 665,000 cu ft bale, 14/14½ knots on 24 tons fuel plus 1½ tons diesel oil, 22s 3d, 6/10 months, February 5/20 (Chinese charterers).

NEWS FROM OVERSEAS

From The Shipping World's Own Correspondents

Export Work for Japan

JAPANESE SHIPBUILDERS have begun the New Year with their export target of 500,000 grt for the current fiscal year, which ends on March 31, already passed. According to Ministry of Transportation figures, export orders for 55 ships, totalling 584,628 grt, were approved by the Ministry in the 1 April 1960-December 26 period. Russian orders for four tankers, each of 35,000 dwt, and three dry-cargo vessels, each of 12,500 dwt, near the end of the year suddenly raised the export tonnage above the goal. A Russian buying mission negotiating the orders in Japan also contracted for a 39,200-dwt tanker and one of 40,000 dwt, both of which had been laid up at the builders' yards because of difficulties over delivery to the original orderers.

The Mitsubishi Shipbuilding & Engineering Co Ltd is to build two of the 35,000-dwt tankers, and Ishikawa-jima-Harima Heavy Industries the other two. Each vessel will be equipped with a Sulzer 9RD90-type diesel main engine of 18,000 bhp, giving a trial speed of 17.7 knots. The price was stated to be Yen 170 per dwt, with terms of 30 per cent on delivery and the balance in five yearly instalments. Delivery is scheduled for January, February, May and July 1962, respectively. The Hitachi Shipbuilding & Engineering Co Ltd received the order for the three dry-cargo vessels. Their total cost was given as Yen 4,200 mn (about £4.2 mn).

Another big individual order was for five large bulk coal carriers by the Naess interests. These are to be used for hauling American coal to Japan under long-term charters with Japanese steel companies. Also, after prolonged negotiations, two 12,500-dwt dry-cargo vessels, each to have a 12,000-bhp diesel main engine and service speeds of 18 knots, were ordered through the Central Trust of China for Chinese Maritime Trust Ltd and China Union Lines. Delivery is for December 1961 and January 1962, respectively. Two similar vessels are to be built by the Ingalls-Taiwan Shipbuilding & Drydock Co, of Taiwan, for the China Merchants Steam Navigation Co and Taiwan Navigation Co, and all four are to be employed in the Formosa-New York liner service. In addition, the Central Trust of China has placed orders for two dry-cargo vessels, each of 5,500 dwt, with Trieste shipbuilders, and is negotiating for the construction of one of 15,000 dwt and two each of 3,600 dwt in Japan. This makes a total of nine vessels, the number visualised under Nationalist China's first expansion programme.

Domestic Orders

SUBSTANTIAL TONNAGE was also ordered by Japanese owners, mainly under the Government's 16th shipbuilding programme. The most outstanding orders were for two tankers, each of 130,000 dwt. These were placed with the Sasebo Ship Industry Co Ltd, and Ishikawajima-Harima Heavy Industries by the Idemitsu Kokan K.K., one of Japan's leading oil companies, at the year-end. The vessels will be the world's largest tankers, easily eclipsing in size the *Universe Daphne*, 107,000 dwt and due to enter the Persian Gulf-Japan service in April under charter to Idemitsu from Universe Tankships Inc., of Liberia, an affiliate of National Bulk Carriers Inc., of New York, who built the vessel at their Kure yard in Japan.

To be built outside the Government programme, each of the two tankers is to have the following dimensions: Length overall, 954ft; breadth, 141ft; depth, 73ft; draught,



ERIKSBERGS LAUNCH FOR NORWEGIAN OWNERS

The cargo ship "Trianon", launched at the Gothenburg shipyard of Eriksbergs Mek. Verkstads for Wilh. Wilhelmsen, Oslo, is one of a class of 12,600-dwt vessels for these owners. Designed with engines and accommodation aft, the fine hull lines are shown to advantage in this illustration. There are five cargo holds forward of the engine room bulkhead and a small tweendeck cargo hold aft. Weather deck hatches will have folding steel covers. There is a deep tank amidships and another in the lower part of No I hold. The propelling machinery will be a 10-cylinder diesel of B & W type, built by the shipyard, developing 12,500 bhp

53ft 10in. A 28,000-shp turbine main engine will give each a speed of 16 knots under fully loaded conditions. The building cost per vessel is estimated at Yen 5,200 mn to Yen 5,300 mn (about £5.2 mn to £5.3 mn). The Sasebo Ship Industry Co Ltd is scheduled to lay the keel of the first tanker in August this year, and to complete it in October 1962. The second is due to be completed a year later by Ishikawajima-Harima Heavy Industries. Both will be employed in hauling crude from the Persian Gulf to Japan.

Growth of the Norwegian Fleet

THE STATISTICS from Det Norske Veritas concerning the Norwegian merchant fleet in 1960 are interesting. They state that during that year 56 motor vessels and 35 steamers totalling 458,900 grt were sold abroad. It is the largest fleet of Norwegian vessels ever sold abroad in one year. At home seven motor vessels and 14 steamers totalling 37,000 grt were scrapped. However, during the year 119 new vessels of 915,700 grt were delivered from foreign and home yards to Norwegian owners, and of these 35 were tankers totalling 521,000 tons, Norwegian

(Continued on page 140)

Oil Topics

BRITISH INTEREST IN NORTH AFRICAN OIL

BRITISH COMPANIES hold a share in extensive oil concessions in North Africa, which has become one of the world's leading producing areas. This is apparent from a memorandum on "North African Oil Concessions" which has just been published by Petroleum Information Bureau. From this fact it appears to follow that British and Britishcontrolled tankers will increasingly be fetching crude from this area. The memorandum shows that among the Algerian areas in which British interests are concerned is the Edjele oilfield, close to the Libyan border, where oil was first produced last summer. A pipeline from Edjele to the Tunisian port of La Skhirra was completed towards the end of 1960. Other concessions shared between British and other concerns include some in the vicinity of Hassi Messaoud-the main source of Sahara production-and areas further west, which are still relatively unexplored. In addition to these undertakings in the Saharan region of Algeria, there is also a substantial British participation in the search for oil in Libya. A further addition to British interests in Libya comes with the announcement that BP Exploration Company (Libya) Ltd has entered into an arrangement with Mr Nelson Bunker Hunt of Dallas, Texas, whereby BP acquires a 50 per cent interest in Concession 65 granted to Mr Hunt in 1957. This Concession covers nearly 33,000 square kilometres in southern Cyrenaica. By these arrangements BP undertakes responsibility for locating and drilling certain test wells in Concession 65 and for joint development of any discoveries made. Apart from British concerns, there are a wide variety of other nationalities represented in North Africa. They include Dutch, U.S., German, Italian, Spanish and of course French interests.

First Gulf Refinery in Europe

THE Gulf Oil Corporation, whose sale volume in European markets has been expanding, has now decided to build its first refinery in Europe at Stigsnaes, on the south-west coast of the Danish island of Zealand. The refinery will have a crude oil throughput capacity of about 1,500,000 tons annually, and is expected to go on stream by the end of 1962. As well as supplying Denmark, the products will be sold in Sweden-Gulf Oil's largest marketing area in Europe-and possibly in Finland. One of the salient factors influencing the choice of Stigsnaes, in preference to a site that was under consideration in Southern Sweden, is the excellent potential harbour facilities which will accommodate the largest and most modern tankers. Until a few years ago, Scandinavian countries were regarded as relatively unattractive for the location of full-scale refineries, but this has changed with the growth of inland consumption, to a current rate of about 5 mn tons a year in Denmark, and over 20 mn tons in the whole of Scandinavia. Denmark will be having two refineries as Tidewater is now building a full-scale refinery at Kalundborg, on the west coast of Zealand, which with an initial capacity of a million tons a year will go on stream towards the end of this year, or about one year in advance of Gulf Oil's plant. Also Caltex and Royal Dutch/Shell are each considering the erection of a refinery either in Denmark or elsewhere in Scandinavia.

Improvements at Immingham

EXTENSIONS being made to Immingham Docks by the Immingham Storage Co Ltd will provide additional storage space for 75,000 tons of liquid fuels and edible oil. They will cost about £500,000, and the work is scheduled to commence this month and to be completed in nine months time. The installations, consisting of about 35

tanks, will cover an area of 8½ acres. The British Transport Commission's decision to improve the western jetty to take tankers of up to 26,500 dwt has prompted the expansion plans, and Immingham is hoping to attract some of the substantial edible oil trade which goes to Hull, and also to get back the trade in the storage of molasses when the jetty and tank facilities are available. Immingham is at present handling substantial quantities of imported fuel via the western jetty, and these are expected to show considerable improvement when the extensions are completed.

RECENT SHIP SALES

CARGO STEAMER Euryades (ex-Glenshiel, ex-Eumaues, ex-Samnesse, launched as Simon B. Elliott, 10,650 dwt, 7,308 grt, 4,305 nrt, built Baltimore 1943 by Bethlehem Fairfield Shipyard) sold by China Mutual Steam Navigation Co Ltd to the World Wide Steamship Co Ltd, Hong Kong, for about £120,000. She passed survey in January 1960.

Motor vessel King Robert (ex-Empire Grange, 9,630 dwt, 6,981 grt, 4,164 nrt, built Belfast 1943 by Harland & Wolff Ltd) sold by King Line Ltd to Hong Kong trading buyers for £107,500 with survey due.

Cargo steamer Fotoulia (ex-Marina Hill, ex-Fort Connolly, 10,330 dwt, 7,029 grt, 4,341 nrt, built 1943 by Burrard Dry Dock Co) sold by Portofino Cia. Naviera S.A., Monrovia, to Far Eastern buyers for £72,500, survey due, with prompt delivery Hong Kong where she has been laid up since 8 September 1960.

Cargo steamer Sunjarv (ex-Sunray, ex-Grafton Park, 10,713 dwt, 7,155 grt, 4,307 nrt, built Montreal 1944 by United Shipyards Ltd) sold by Saguenay Terminals Ltd to London Greek buyers for £73,000, with prompt delivery U.K., survey due. She is lying at Barrow-in-Furness.

Cargo steamer Atlantic Oriole (ex-American Oriole, ex-Nathan Clifford, 10,920 dwt, 7,248 grt, 4,445 nrt, built Baltimore 1943 by Bethlehem Fairfield Shipyard) sold by Atlantic Oriole S.S. Corp., Monrovia, to Panamanian buyers, for retention under Liberian flag. She had been idle at Baltimore since 2 February 1960.

Refrigerated fish factory motor vessel *Tinian* (3,393 grt, 2,646 nrt, built 1945 at Pittsburg by the Dravo Corporation) sold by Columbia River Packers Association Inc., Astoria, Ore., to French buyers for \$335,000. She was under Honduran registry.

Cargo steamer Stugard (ex-Webb Miller, 10,626 dwt, 7,291 nrt, 4,382 nrt, built Portland, Me., 1943 by New England Shipbuilding Corp.) sold by A/S Ulabrand (Hjalmar Roed & Co), Tonsberg, to London Greek buyers for about £110,000, with prompt delivery Sandefjord, survey passed.

Motor vessel English Prince (10,250 dwt, 7,275 grt, 4,548 nrt, built 1943 by Wm. Doxford & Sons Ltd) sold by Prince Line Ltd to London Greek buyers for what is reported to amount to £142,000, with end-January delivery at Dunkirk.

Twin-screw motor vessel Valfredda (ex-Lago Zuai, 886 grt, 456 nrt, built Taranto 1940 by Soc. Cantieri Nav. Franco Tosi) sold by Lloyd Mediterraneo to Greek buyers, understood to be P. Bourboulis & Co, and renamed Marie Bourboulis.

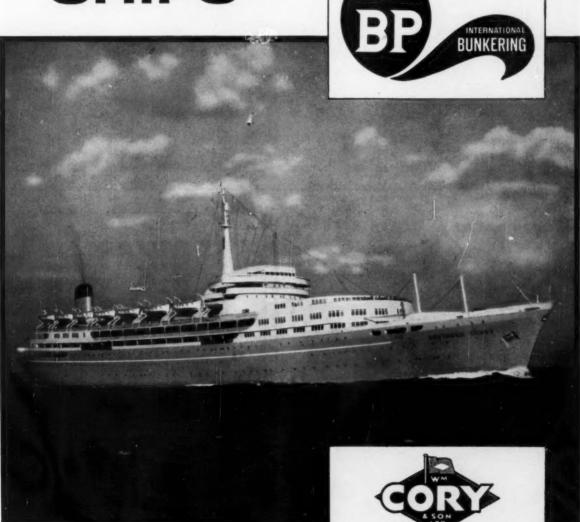
Motor vessel Klaus Turowsky (575 dwt, 398 grt, 252 nrt, built 1955 by Husumer Schiffswerft) sold by Karl Heinrich Danz (Joh. Thode), Hamburg, to Rederiet Vesta I/S, Svendborg, and renamed Susanne Vesta.

Motor coaster Nivernais (517 dwt, 389 grt, 185 nrt, built 1933 by Ateliers & Chantiers de France) sold by Cie. Maritime de la Seine to Greek buyers and renamed Argo.

Cargo steamer Merchant (ex-Empire Miranda, 9,900 dwt, 7,045 grt, 4,745 nrt, built 1943 by Lithgows Ltd) sold by Charente Steamship Co Ltd to Panamanian buyers for something over £50,000.

Tank steamer Olterra (ex-Emma, ex-Baton Rouge, ex-Osage, 4,929 grt, 2,885 nrt, built 1913 by Palmers' Co Ltd) sold by Ditta Andrea Zanchi, Genoa, to shipbreakers at Savona, having been laid up at Genoa since 31 March 1958.

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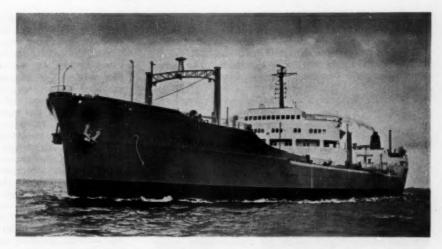
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The "Soya-Maria"

SWEDISH VESSEL WITH BRITISH PROPELLING MACHINERY



AN OIL tanker propelled by steam turbines of British design and manufacture, and equipped with several British-made auxiliaries, has been delivered from AB Götaverken. This vessel, the Soya-Maria, 40,420 dwt, is owned by Rederi A/B Soya (Olaf Wallenius), Stockholm. The main turbines were built by Parsons Marine Turbine Co Ltd, and there are two A.E.I. turbo-alternators. Other items of British construction have been supplied by Drysdale & Co Ltd, G. & J. Weir Ltd, and White's Marine Engineering Co Ltd. The boilers have been built by Götaverken under licence from Babcock & Wilcox Ltd.

Special attention has been given to the layout of the engine room, into which the longitudinal bulkheads have been extended over half the length, as is customary with Götaverken-built ships of large tonnage. This extension provides extra strengthening and reduces much of the vibration usually occurring at the stern due to the propeller. The space outside the two extended longitudinals is used as bunkers for fuel.

Of interest in the engine room is the new Elenik-Götaverken power log which has been fitted for the first time in any vessel. This instrument gives direct readings of torque, shaft horsepower and revolutions per minute. Details of this electronic apparatus are given on page 137 of this issue.

The principal particulars of the Soya-Maria are as follows:—

Length o.a			***	700ft 3in
Length b.p	***	***		670ft
Breadth, moulded	***	***	***	96ft 3in
Depth, moulded	***	***	***	48ft 3in
Draught, summer	***	***	***	35ft 11in
Deadweight		***		40,420 tons
Capacity of cargo	tanks		***	1,861,500 cu ft
Machinery output	***			17,500 shp
Speed	***	***		17 knots
Bunker capacity		***		4,000 tons

The Soya-Maria has been built with eleven centre tanks and 22 wing tanks, the No 6 wing tanks being used exclusively for water ballast. The main pump room is arranged abaft the cargo tanks and is provided with three turbine-driven centrifugal cargo pumps and two steam-driven reciprocating stripping pumps. The cargo pumps are each of 1,500 tons/hour capacity while the stripping pumps are each of 500 tons output. The ship is equipped with automatic mooring winches.

Accommodation

Accommodation is provided amidships and aft. In the midships structure there is a saloon, cabins for the captain, owner and deck officers, a hospital and offices. Aft there

are dayrooms, messrooms, the galley and cabins for engineers, PO's, cooks and crew. In the captain's, owners' and officers' accommodation wide use has been made of hardwood timbers such as teak, bubinga, palisander, macore, walnut and mahogany. Beech is used in the crew accommodation and plastic laminate is used as a covering on the bulkheads in the messrooms, dayrooms and alleyways.

The galley has been equipped with the latest type of equipment including a potato peeler, slicers etc, and the ranges and ovens are electric. There is a laundry, abaft of which is a swimming pool; and there is a recreation room where table tennis can be played, as well as a darkroom for those interested in photography. Several different brands of paint and compositions have been supplied for this vessel by Fargaktiebolaget International, Gothenburg, the Swedish associate of International Paints, London.

Propelling Machinery

The Soya-Maria is powered by a set of steam turbines of Parsons design and construction consisting of an HP and LP turbine with an underhung condenser. The output at a propeller speed of 98 rpm is 17,500 shp. The astern turbine is incorporated in the LP turbine casing and has sufficient power to bring the vessel to a stop in 7 minutes and to drive the propeller at 75 rpm, giving an astern speed of well over 10 knots.

Steam is generated in two Babcock & Wilcox selectable superheat type boilers built by Götaverken under licence.



The dining saloon. At the far end is the smokeroom

At maximum output the capacity of these boilers is sufficient to operate the turbines at maximum output, and at the same time heat the cargo. The maximum rating is 82 tons of steam/hour at 600 lb/sq in and 850 deg F, but the normal rating is about 60 tons/hour. The boilers are fitted with a gas air heater and a small steam air heater. They are also equipped with steam sootblowers, Weir's water level regulators and feedwater treatment plant.

A.E.I. Turbo-Alternators

As stated much of the machinery in this ship is of British manufacture and in addition to the Parsons main turbines there are two turbo-alternators built by A.E.I., Rugby. The latter units are rated at 700 kW each and are of the self-contained type with turbine, gearing, alternator and condenser built in one block. There is also a 200-kW diesel of Götaverken's own type with an ASEA alternator. One turbo-alternator will be sufficient for the electric supply under all circumstances except when vacuum is lost. The output of the diesel alternator is high enough to enable a quick start should either of the turbo-alternators fail. It will be possible to run both the harbour feed pumps (with a capacity of 20 tons/hour) and a boiler fan at the same time as power is given to the main lights, the navigation instruments and some of engineroom ventilation fans etc. The overload signal for the alternator is one of the points on the alarm panel that in all contains 30 different items.

The pipe system for superheated steam is made of alloy steel and has been kept down to a minimum, only the main turbine and the two turbo alternators being driven by superheated steam. Nevertheless both this piping and the desuperheated steam line have been laid out in a manner that will make it possible to overhaul any one valve, or flange, during the running of the ship, with the exception of the main pipes from the boilers to the main turbine. For instance the supply to the air ejectors and the gland steam ejector is in the form of a ring main so that any section can be shut off for repair without affecting the propulsion of the ship.

For a similar reason the system for the condensate for each turbo-alternator has been made completely independent and independent also of the main system. On the other hand the systems for the main and cargo pump condensers are mixed, but access to each condenser for repair is possible when the other is in operation.

This ship, as well as all previous turbine tankers from

Götaverken, has been equipped with Velan steam traps of different types. For high pressure steam drains the Naval type has been used and for low pressure drains several different types of Velan S-traps are installed. It is possibly of interest that even the heater drains are regulated by Velan traps in some cases and here the piston type is used.

All the turbine-driven machinery has been placed on the main floor of the engine room. Thus the main turbines, the two turbo-alternators, the two turbo-feed-pumps, the three cargo pump

turbines and their steam air ejectors can be serviced from this platform and also most of the steam valves can be operated from here. Below the main floor plates, in the "well," the ordinary pumps are situated and all of them, excepting two, are motor-driven. In this way the steam pipe system is mainly concentrated at one level, which simplifies maintenance.

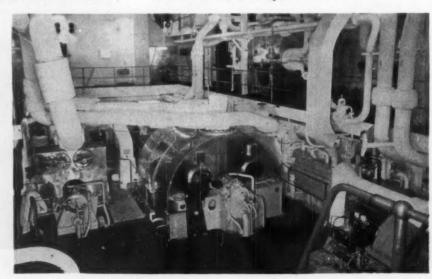
Above the main floor there is a balcony running all the way round the engine room, and at this level all items that need special supervision are concentrated. Here are the main manoeuvring valves, instrumentation, alarms and running lights, the air-operated reducing valves, evaporator blocks, the main electric switchboard and the steam-to-steam generators. The after part of this balcony is intended for the support of heavy machinery parts during the change over from the ship's travelling crane to the dockside crane.

The turbine manoeuvring platform is also close to the main floor of the boiler room, so that contact can be held between personnel serving the boiler and those operating the main engines: this can be of great importance while manoeuvring. All the equipment for boiler operation, such as the automatic boiler control, fuel heating equipment, switches for boiler fans, etc, is located at this level.

NEW IRAQI PORT

Skanska Cementgjuteriet, large Swedish contractors, have concluded a contract together with the West German firm Grün und Bilfinger AG and the Lebanese building firm F. Kettaneh Brothers, for the building a large new port at Umm Qasr on the Persian Gulf. The contract is worth over £6,900,000. Umm Qasr is situated 80 kilometres south of Basrah in a desert region. The port will be designed for ocean-going tonnage and will, in the first stage, have a modern concrete quay of close on 800 metres. Construction work includes wharves, an 18-in water conduit to Basrah, a water purification plant, high-voltage transmission lines and houses for the workers and other staff on the site. An entire city is later to be built up round the port.

THE MARINE EXCHANGE INC., of San Francisco, reports that 10,105 cargo and passenger ship movements took place in and out of the port involving vessels with a net tonnage of 52,645,857. 5,094 ships—or an average of over 424 a month—arrived during the past year, and 5,011 sailed, compared with 4,897 arrivals and 4,863 departures in 1959.



The Parsons steam turbine propelling machinery. The output at 98 rpm of the propeller is 17,500 shp

Elenik-Götaverken Power Log

DIRECT READING OF HORSEPOWER, SPEED AND TORQUE

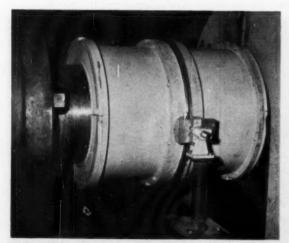
THE tanker Soya-Maria, described on page 135 of this issue, has a new type of electronic instrument in the engine room which gives direct readings of shaft horse-power, torque and speed. This instrument, known as the Elenik-Götaverken power log, has been developed by Ingenjörsaktiebolaget Elenik, Stockholm, in conjunction with Götaverken A/B, and was seen for the first time on the large bore Götaverken engine described in THE SHIPPING WORLD of 30 November 1960. The instrument comprises three gauges which are contained in a small case which, together with a second instrument, may be placed in any position on board ship.

The angular displacement along a certain length of the propeller shaft (which is proportional to the torque) is converted by means of two toothed wheels and a phototransistor pick-up into a train of light pulses, with the ratio between light and darkness proportional to the torque. The number of pulses per second corresponds with rotational speed, so that the single pick-up connected to the transistorised pulse circuits allows simultaneous reading of torque, revolutions per minute and shaft horsepower. The latter quantity is obtained by electrical multiplication of the two directly measured quantities.

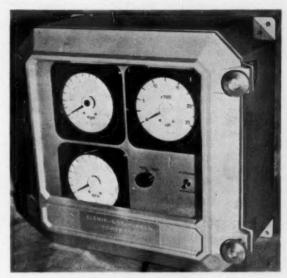
The complete instrument comprises three units: an AC gauge converting angular to circumferential displacement which is mounted on the shaft; a phototransistor pick-up which is rigidly mounted perpendicular to the two toothed wheels in the AC displacement gauge and to one side of this; and the main power log unit which can be placed in any position on board the ship, and which contains all the electronic circuitry and the three meters which give readings of torque in kilograms, shaft horsepower and rotational speed in rpm. Duplicates of any of these meters may be placed wherever so desired.

The AC displacement gauge is manufactured in three basic sizes and fitted to the shaft by means of special rings. The three sizes are suitable for shafts having diameters from 250mm to 600mm. The phototransistor pick-up is independent of the shaft diameter, and should be rigidly mounted close to the shafting.

The electronic instrument is mounted in a robust water and dustproof cast aluminium case designed for mounting on a bulkhead. The three meters for recording



The gauge carrying the two toothed wheels, and the phototransistor



The case containing the three meters giving readings of torque, shaft horsepower and revolutions per minute

torque, shp and rpm can be calibrated individually according to customers' requirements. Readings obtainable from this instrument are claimed to be accurate within 1 per cent.

The Elenik-Götaverken power log is designed for 110/220 volts, 50/60 cycles single-phase. The power consumption is about 30 VA. Overall dimensions are depth 285mm, height 530mm and width 580mm. The weight is about 50 kilograms. Further details may be obtained from Ingenjörsaktiebolaget Elenik, Norderflychtsvägen 62, Stockholm K, Sweden.

It was stated in The Shipping World last week that Hawker-Siddeley Brush turbochargers were fitted to the Doxford P range engine now installed in the tanker Montana. This should not be taken to imply that these turbochargers are being used in the ship in service. They were one of the makes of turbochargers tested while the engine was on testbed trials.

SWAN HUNTER & WIGHAM RICHARDSON LTD have opened a pre-apprenticeship training scheme at their Dry Docks Department, Wallsend. At present, 28 boys are receiving a three-months' course on citizenship, discipline, and general outline of industry. Subsequent courses will last six months. Mr P. Denham Christie, a director of the firm, is in charge of the scheme.

P & O-ORIENT LINES' passenger liner *Iberia* has been taken in hand by John I. Thornycroft & Co Ltd, Southampton, who were awarded a contract for improvements to the vessel and the installation of complete air-conditioning plant. *Iberia* will be the last of the vessels to be air-conditioned under the programme announced in August 1958, which has entailed the complete air-conditioning of the combined postwar fleets of the P & O Steam Navigation Company and the Orient Steam Navigation Company (now P & O-Orient Lines).

THE SERVICES provided by Welding Supervision Ltd and Cathodic Corrosion Control Ltd (wholly owned subsidiaries of Constructors John Brown Ltd) have been amalgamated and will now be provided by a single company—Corrosion & Welding Engineering Ltd.

Launch of the "Transvaal Castle"

HOTEL-CLASS LINER FOR SOUTH AFRICAN MAIL SERVICE

ON TUESDAY January 17 the 33,000-tons passenger liner Transvaal Castle was launched from the shipyard of John Brown & Co (Clydebank) Ltd. The ceremony was performed by Lady Cayzer, wife of the chairman of the British & Commonwealth Shipping Co Ltd, Sir Nicholas Cayzer. When completed the Transvaal Castle will join other vessels of the Union-Castle fleet in the South African mail service; but unlike the other ships she will be arranged as a hotel-class liner. There will be several different types of cabins from which passengers can make a choice but, like a hotel, the public rooms and amenities will be available to all.

This means that while the cost of the passage will be based on the type of room reserved, all on board will use the same restaurants, lounges, smokerooms etc. Accommodation will be provided for about 740 passengers in a wide choice of rooms which will include 184 double rooms with private shower and toilet, 41 single rooms with private shower and toilet, 45 double cabins, 25 three-berth and 33 four-berth cabins and a small number of more expensive cabins. It is understood that although the fares are naturally not as expensive as those for a voyage in a first-class ship, anyone wishing to pay for first-class quality accommodation in the *Transvaal Castle* will not be disappointed, as the cheapest accommodation in the new ship is on a level with the most expensive tourist accommodation in other ships.

No Permanent Subsidisation

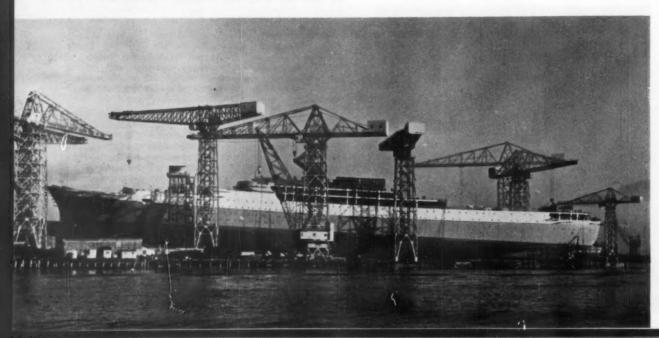
Speaking after the launch, Sir Nicholas Cayzer had some words to says on the future of British shipping. (It will be recalled that Sir Nicholas is the chairman of the policy committee of the General Council of British Shipping which produced the survey of the industry published a few weeks ago.) He showed his unwillingness to accept the idea of British shipping being permanently subsidised, saving that on a long term basis, and leaving the strategic aspect apart which is a matter on which the Government must make up its mind, he saw little reason in British shipping surviving unless it were economic. "This does not mean that temporary subsidies should be overlooked, but they can only be regarded as a shot in the arm while international shipping is finding its way to a sane modus vivendi." The long term aim for Great Britain was a well balanced and viable fleet, and shipowner and Government together should worry the problem out as to how this was to be achieved.

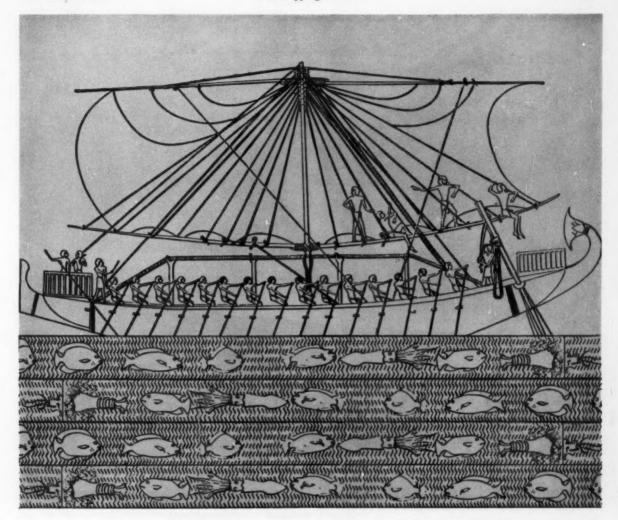
Discussing the company's recent new construction, he said that the *Tranvaal Castle* followed in the wake of two other great ships, *Pendennis Castle* and *Windsor Castle*. They had made no attempt at standardisation in these vessels, but rather tried to provide a service with a variety of ships so that as many tastes as possible were met.

Quite a lot had been said and written of late on the shortcomings of British shipbuilders and the lack of enterprise of shipowners in the design of new ships. It was quite right that such important activities in the life of the country should be a focus of interest and comment. "Perhaps Windsor Castle, Transvaal Castle, Canberra and Oriana make more eloquent answer than words, but don't for a moment think that I am not fully alive to the great need for research and for examining what is being done in British yards to keep us in the van of progress, for without research I am doubtful if British shipbuilding can survive. The aircraft industry certainly would not have. and the Government has not been backward in seeing that they have the means. Shipbuilding is no less important. The money spent by the Government in research on aircraft construction and shipbuilding bears no comparison. I am in no way complacent in regard to the part the shipowner has to play. In my own company research plays no small part, and we are ever ready to learn. Research in this sphere must include not only technical and market research but consideration of new management techniques, and finding and training the right men is vital. I have no doubt that John Brown's will not only maintain the great tradition for shipbuilding which the Clyde enjoys but will lead the world in new techniques and ideas.'

With the Transvaal Castle the Union-Castle Mail Steamship Company will have three new ships, including the Pendennis Castle (SW, 7.1.59) and Windsor Castle (SW, 17.8.60). The new ship will carry general and refrigerated cargo like all other vessels on the South African mail service. She will be a little shorter than the previous two ships and will have a bulbous bow which will achieve

The "Transvaal Castle" before her launch. She was built on the berth adjacent to that from which the "Queen Mary" and "Queen Elizabeth" were launched





The Conquest of the Sea continues

Primeval man in his hollowed-out tree trunk may be forgiven for having congratulated himself on achieving the ultimate in ship design. The same pride must have recurred during the millennia when oars, sails and propellers replaced the pole and the paddle as means of propulsion. Even today new materials and techniques change the design and performance of ships. Take Marinite.

This light, incombustible sheet, used for accommodation structures, has given ships' designers new scope, one instance being the simultaneous sheathing and fire insulation of aluminium in ships' superstructure,

A few statistics—So far, 14 million square feet of British-made Marinite have been delivered for 790 ships. 151 owners satisfied and 114 shipyards supplied.





Built by John Brown & Co. (Clydebank) Ltd. for Union Castle Line



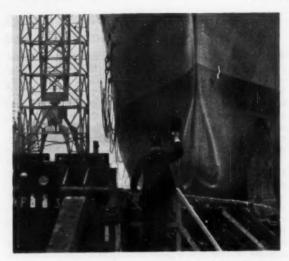
65,000 sq. ft. of Stillite Semi-Rigid Slabs in thicknesses of 1" and 2" were employed by the Insulation Contractors McAndrew, Wormald and Co. Ltd. of Glasgow for Fire Proof Insulation of the engine room casing of this fine new ship.

The completely fire-proof nature of Stillite insulation (fusing point in excess of 2,500°F) combined with its high thermal and acoustic insulating properties, makes Stillite mineral wool products eminently suitable for use in shipping—available in a wide range of forms for:—Weather Deck Insulation · Engine Room and Boiler Casings · Passenger and Crew Accommodation Partitioning · Protection of Class A and B Bulkheads · Insulation of pipe work and Air Conditioning Trunking. Please send coupon for full details.



10	STILLITE	PRODUCTS	LTD.	5 Whitehall,	London,	S.W.1
	Please	send details	of Stillit	e products for	marine use.	
N	AME		*************		************	
AI	DDRESS		******		*******************	

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Mr John Rannie, shippard director of John Brown & Co (Clydebank) Ltd and the current president of the Shipbuilding Employers' Federation, watches the ship go down the ways

some saving in power and reduce pitching in bad weather. Public rooms will comprise a dining saloon extending the full length of the ship and seating about 414, assembly room, Orangery bar, smokeroom, drawing room, cinema, writing room, library, observation verandah and verandah café.

Special precautions against fire risk are being taken and the ship will have a complete installation of automatic sprinklers in all passenger and crew spaces. Marinite incombustible sheeting is being used throughout the accommodation structures for bulkheads and linings; and it is also being used for the statutory fire insulation of all A-class divisions.

Of the 643,000 cu ft of cargo space available, 362,000 cu ft will be refrigerated for the carriage of fruit and other perishable commodities. The holds, baggage spaces etc will be served by 32 hatches, each of which will be fitted with MacGregor hydraulically-operated covers, all flushfitting with the exception of the forecastle deck hatch. Nos 2 and 3 hatches will be served by a 2-tons traversing deck crane.

Propelling Machinery

The propelling machinery in the Transvaal Castle will consist of two sets of steam turbines of PAMETRADA design capable of developing a total of 40,000 shp in normal service, which will give her a cruising speed of 23 knots. The maximum power will be 44,000 shp. This is the same type of machinery as that fitted in the Windsor Castle, but slightly derated.

In the Windsor Castle the three main boilers were supplied by Babcock & Wilcox and are of the selectable superheat type. The steam conditions at the superheater outlet are 600 lb/sq in and 950 deg F with a 415 deg F feed. Each boiler is capable of a maximum evaporation of 156,000 lb/hr, with a service output of 125,000 lb/hr when steaming with three boilers at the normal power for 221/2 knots for 45,000 shp. At the reduced speed of 19 knots, two boilers only are required to give 27,000 shp. It should be noted that the Transvaal Castle has a deadweight of 33,000 tons compared with 38,000 tons for the Windsor Castle, so that less power is required for the smaller vessel. As previously mentioned in THE SHIPPING WORLD, the Windsor Castle had to fit in with those ships already employed on the mail service to the Cape, and which requires a speed of about 19 knots, with an extra knot in reserve for delays or bad weather. The ship had also to meet the requirements for a future improvement in the service when a speed of $22\frac{1}{2}$ knots will be necessary.

The boilers in the new ship will be of Foster Wheeler design and fitted with automatic control. The two main condensers, with a total cooling surface of 33,000 sq ft are of the Weir regenerative type made under licence by John Brown & Co (Shipbuilders) Ltd, G. & J. Weir are supplying a number of auxiliaries including condensate-extraction pumps, steam jet air ejectors, deaerator extraction pumps, and boiler feed pumps.

Unlike the Windsor Castle, the electrical supply will be AC. This will be supplied by four A.E.I. turbo alternators, each of 1,500 kW output at 440 volts.

For the fireproof insulation of the engineroom casings Stillite mineral wool semi-rigid slabs have been supplied by Stillite Products Ltd, London. The insulation contractors were McAndrew, Wormald & Co Ltd, Glasgow, who used 60,000 sq ft of 2-in and 5,000 sq ft of 1-in thick Stillite slabs for this purpose. Extensive official testing at the Department of Scientific & Industrial Research fire research station has been given to this product, with the result that Stillite semi-rigid slabs of 13 lb/cu ft have been approved by the Ministry of Transport for A-class fire-resisting divisions on passenger vessels to comply with the International Conference on Safety of Life at Sea.

BOOK REVIEWS

The Aeroplane, by Dennis M. Burges. (Frederick Muller Ltd, 110 Fleet Street, London EC4. Price 98 6d.)

The latest addition to the publishers' Mechanical Age Library serves as an excellent introduction to the subject. It covers briefly but adequately the early history of flight, lucidly explains in non-technical language the elements of aerodynamics and the principles of aero engines, traces the development of new aircraft and new designs and technical advances in the last 40 years, and ends with a most interesting and informative account of how a modern airliner is designed, developed and put into service.

The Brittle Fracture of Steel, by W. D. Biggs. (Macdonald & Evans Ltd, 8 John Street, London WC1. Price 70s.)

A great deal has been published on the brittle fracture of steel since the days of the first investigations into failures in ships and other welded structures. This book is intended, in the author's words, "to reconcile... the differing approaches made to the problem of brittle fracture by the engineer, the metallurgist and the physicist, and in particular to lay emphasis upon those metallurgical features which, in the last analysis, determine whether or not the material will behave in a ductile or a brittle manner. The author began the book when serving in the research department of Murex Welding Processes Ltd, and completed it at the Engineering Laboratories of Cambridge University. It is not intended for the novice in metallurgy, but will be found most useful by all those in ship design and ship construction who are concerned with this subject.

Reed's Nautical Almanac, 1961, edited by Capt. O. M. Watts. (Thomas Reed Publications Ltd, High Street West, Sunderland. Price 21s.)

The latest edition of this well-known almanac follows closely along the lines of its predecessors. Twelve new tidal stream charts for the English Channel have been added, so that directions and rates of change in this extensive area can be found in greater detail. Details of the new simplified distress signals which came into force in 1960 are also included.

Lloyd's Calendar, 1961. (Published by the Corporation of Lloyd's. Price 12s 6d net, 13s 9d by post.)

This is an annual publication too well known to need much by way of review. It is sufficient to say that the calendar occupies two out of the 736 pages of the book, the rest being devoted to a wide range of information on innumerable subjects of interest to shipowners and shipmasters.

ESSENTIAL SHIPPING REFERENCE

New Edition of The Shipping World Year Book

THE new edition of THE SHIPPING WORLD YEAR BOOK & WHO'S Who is the seventy-third. Over the years it has changed considerably in contents, but the framework remains the wide variety of reference material useful to all those engaged in, or having dealings with, the maritime industries in an international context. There are a dozen different sections to the book, but the largest in actual pages is the Directory of Shipowners. In the 1961 edition the coverage of this section has been considerably extended. About 180 shipowning companies have been added, bringing the total of liner, tramp, coaster and tanker owners included to about 1,800, a far wider spread of information than is contained in any other shipowners' directory published anywhere in the world, apart from Lloyd's Register, which gives only brief details. The directory includes details of personnel at board, management and technical levels, as well as listing branch offices, U.K. representation (in the case of overseas companies) and size and type of fleet.

As in the case of the other main directory sections—covering shipbuilders, shiprepairers, marine engine builders and towage and salvage contractors—the entries are listed country by country, the different countries being arranged alphabetically within each directory. Access to this mass of information has been simplified by the introduction in this edition of distinctive marker tabs.

Another new feature is a directory of shipowners' mutual clubs, which appears immediately after the section covering British and international maritime organisations. Though it occupies only a few pages, this new directory covers an aspect of the shipping industry of wide and historical significance.

There are eight other main sections, including the Who's Who with over 60 new entries, and they have all been thoroughly revised. Tables of steaming distances on the world's main trade routes, and the range of horsepower of the different types of propulsion machinery supplied by engine builders are two further innovations.

The Year Book is priced at 60s, plus 2s 6d postage and packing, and copies may be obtained from The Shipping World Ltd, 127 Cheapside, London EC2.



LARGEST BRITISH-MADE DERRICK

The Clan Line steamer "Clan Sutherland", built in 1951 by the Greenock Dockyard Co Ltd, Greenock, recently returned to the yard to be fitted with the largest derrick to be suppled to a merchant vessel by a British manufacturer. The derrick is of tubular steel and has a safe working load of 165 tons. Supplied by Stewarts & Lloyds Ltd, it is shown undergoing tests at the shipyard

NEWS FROM OVERSEAS

(Continued from page 133)

yards delivered 50 motor vessels and one steam turbine vessel of a total gross tonnage of 243,200 tons, including nine motor and one steam tankers totalling 133,200 tons. In addition to these deliveries 14 motor vessels and two steamers aggregating 115,100 tons were bought from abroad secondhand. Thus the size of the fleet of vessels over 100 grt was 2,798 units aggregating 11,209,000 grt, of which 541 vessels and 6,133,000 tons were tankers at the end of 1960.

The year 1961 started with as near to full employment for the Norwegian merchant fleet as can be expected in peace time. At 15 December 1960 there were 39 units laid up of 461,880 dwt, of which 28 totalling 387,600 tons were tankers. Since that date more vessels have been reemployed and those remaining at the end of the year were to a great extent such vessels as were waiting to be scrapped, taken over by other owners, or idle on account of extensive repairs waiting to be carried out at a more convenient date.

Swedish Shipbuilding in 1960

A SURVEY of 1960 published by The Swedish Shipbuilding Industry Association shows that Swedish shipyards delivered 84 vessels, aggregating 1.1 mm dwt, during 1960. A total of 13 vessels was delivered by Eriksberg, closely followed by Kockums with 11 vessels, while Uddevallavarvet secured the third place with a total of 96,449 tons. The order books of the industry have been reduced, although 50 new contracts for about 500,000 dwt were signed last year. At the end of 1960 about 200 vessels, totalling about 2.4 mn grt or 3.6 mn dwt, were on order. Most of the vessels on order are for Swedish shipowners.

The Swedish Shipbuilding Industry Association has continued its efforts to bring about the establishment of an institute for export credit which will relieve the shipyards from this burden and make possible exports to countries outside Scandinavia. The Standardisation Control Board of the shipbuilding industry has distributed a first dossier giving common standards agreed upon by the shipyards. When standardisation measures have been approved they will similarly be distributed as supplements to this dossier. The Foundation for Shipbuilding Research has chiefly worked in 1960 on the development of the library service, and much attention has been devoted to computers, steel problems, the stresses on vessels at sea and the use of nuclear power for the propulsion of ships. Together with The Swedish Shipbuilding Industry Association this body has moved to a new address: Gustav Dalénsgatan 1, Gothenburg.

Verolme Yard in Peru

THE Peruvian Senate has been asked to ratify the contract signed by the Government and the Dutch shipbuilding firm of Verolme, providing for the modernisation and expansion of the Callao shipbuilding yard. Under the contract, a company, to be called Astilleros Peruanos Verolme, would be set up with a capital of 250 mn soles, half of which would be subscribed by the Government. The Bill would authorise the Government to raise a loan of 70 mn soles, or its equivalent in foreign currency, towards its share of the capital, and would authorise the Corporacion Peruana de Vapores to purchase six merchant ships. The first of these would be built in the Netherlands and would serve as a prototype for the construction of the remaining five in the Peruvian shipyard.

RECENT TECHNICAL DEVELOPMENTS

High-Pressure Hydraulic Equipment

The world selling rights for a complete range of high-pressure hydraulic equipment have been acquired by Keelavite Hydraulics Ltd, Allesley, Warwickshire. Known as the Keelavite/Gury range, it comprises a series of fixed-capacity piston pumps and the complementary control valves for the building of complete high-pressure systems working at pressures up to a maximum of 7,100 lb/sq in.

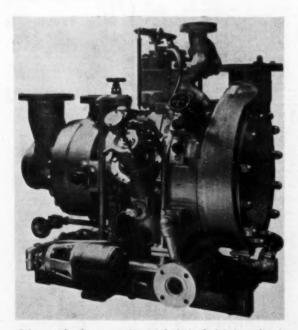
This KG series of pumps is in units having either three or six pistons operated by a cam mechanism. An integral cylinder head incorporates an automatic valve system for controlling the oil flow in the unit. The pump body is of forged steel and is available for foot or flange mounting. There are nine basic sizes, but by varying the piston bore and stroke a total of 22 different volumetric outputs are achieved, from 0.28 gallon/min at 1,000 rpm, to 44 gallons/min at 1,500 rpm. Pressures at 1,500 rpm range from 2,200 lb/sq in to 7,100 lb/sq in for intermittent service suitable for presses etc.

The KG series of pumps is available as double pump units, in which case more than one output with different flows can be obtained. High-pressure directional valves for use with the pumps are available in four sizes, each having five alternative operating mechanisms. Control methods available are for hand lever, cam, or servo operation.

Pulsometer Pacific Steam Turbopump

A LICENCE has been obtained from Pacific Pumps, Inc, California, by the Pulsometer Engineering Co Ltd, Reading, Berks., for the manufacture of Pacific steam turbopumps. These pumps, which are designed for continuous operation at 5,000 to 10,000 rpm, are a completely compact and self-contained unit, considerably lighter and occupying less space than the conventional type of solid casing pump; an important factor where ships are concerned. The pumps are for boiler feed duties on board ship and in industrial undertakings, and comprise a steam turbine and pump mounted on a bedplate.

Very low steam rates are a feature of the turbopump which has steam seals eliminating conventional packing. At surface speeds of 4,000 ft/min the pressure-lubricated shaft bearings become hydrodynamic; the shaft then floats on an oil film and does not make metallic contact with the bearing surface. The bearing life is thus almost limitless, in the absence of dirt or lubricating oil failure.



Pulsometer Pacific steam turbopump for boiler feed duties on board ship

The turbine is of the single-stage impulse type equipped with a centrifugal type speed governor, automatic overspeed trip, hand trip and hand reset. The pump is of the single-stage diffuser type with a single inlet impeller. Turbine bucket wheel and pump impeller are mounted on a common shaft which is supported in two pressure-lubricated sleeve bearings. The weight of the pump is 25 cwt.

Heavy Gauge Electrode Holder

To MEET present-day conditions in the welding industry, where thicker materials and more complicated fabrications are being welded with heavier gauge electrodes at higher temperatures, it has been found necessary to seek an electrode holder which will operate continuously without becoming too hot to handle. Interlas Ltd, 9 Church Street, Ampthill, Bedford, claim that they have the answer to this problem in their new Terrier 600 special electrode holder, which has been designed in such a way that the handle remains cold under extreme working conditions, using up to 5/16in dia. electrodes at up to 600 amps.



Interlas heavy gauge electrode holder

Instead of running through the handle in the usual way, the welding cable is connected direct to the head of the holder, and the operator's hand is protected from any heat in the cable by a deflecting aluminium-painted metal shield, under which the cable is housed in asbestos on its way to the head. The cable is therefore almost in direct contact with the electrode itself, to eliminate the possibilities of the holder heating up. The advantages of this holder are that not only is the operator protected from discomfort, and welding time consequently saved, but the holder itself proves more economical in the long run, as the higher initial cost is more than offset by the long time that the holder can be used before replacement parts become necessary.

SHIPBUILDING ORDERS

During the last quarter of 1960 British shipbuilders secured orders for 72 merchant ships of 210,000 grt to make a total of 248 ships of 627,000 grt for the year ended December 31. This compares with 198 ships of 319,000 grt for 1959, and with 144 ships of 497,000 grt in 1958. During the quarter, existing orders for five ships of 25,000 grt were cancelled, bringing to 20 ships of 165,000 grt the total loss by cancellation in 1960.

The industry's total order book at 31 December 1960 stood at 440 ships of 3,348,000 grt of an estimated current value of £500 mn. Work for foreign owners comprises 52 ships of 562,000 grt, with an estimated value of £75 mn.

THE CHAMBER OF SHIPPING index number of tramp shipping freights for December is 76.7 (1952 = 100). The average for the year was 74.2. The index number of tramp time charter rates is 62.7 for oil-fired steamers and 68.2 for motor vessels.

According to Statistics issued by the Chamber of Shipping, there were 436 ships totalling 3,304,911 grt laid up for lack of employment throughout the world at the beginning of January. Of this total, 226 of 1,328,648 tons were dry cargo ships and 210 of 1,976,263 were tankers. The figures for British ships laid up were 83 of 615,332 grt, of which 32 of 193,284 tons were dry cargo ships and 51 of 422,048 tons were tankers.

Tons Gross 46,097 79,792 10,326 132,441 42,314 1,608 10,075

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83,092 15,770 209,827 43,811

REGISTRATION OF SHIPS UNDER CONSTRUCTION (INCLUDING OIL TANKERS)

SHIPBUILDING ANALYSIS Great Britain and Northern Ireland

PROGRESS DURING QUARTER
Launched
Completed 10004112 0 81,934 35,439 105,580 18,500 13,770 1000-1-6 5 TOTAL UNDER CONSTRUCTION PREPARING Forst forst 6 12.474 77 1.1386.412 77 1.1386.412 77 1.48 175 100.384 2,637,647 No. 1 250 2 1 4 112 Tons Gross 152,474 448,959 95,709 806,527 103,891 5,306 81,322 Total Under Construction 284 | 4633 258 UNDER CONSTRUCTION
Material being Fitting Out
Worked or Afford Construction
No. Tons Gross Gross
2 57,000 4 95,474
40 342,574 13 106,385
14 470,441 22 336,006
24 470,441 22 336,006
85 53,481 43 27,949 Tons Gross 95,474 106,385 15,770 336,086 48,291 950 27,841 630,797 96 168 1,063,391 4 4044 | 88 Passenger
Passenger/Cargo
Cargo Liner
Cargo Tramp
Oil Yanker
Ore Carrier
Collier
Colaster
Miscellaneous

Lloyd's Register Shipbuilding Returns

MERCHANT SHIPS UNDER CONSTRUCTION AT THE END OF DECEMBER 1960

STATISTICS compiled by Lloyd's Register of Shipping show that merchant ships of 100 grt and over under construction in Great Britain and Northern Ireland at the end of December totalled 258 ships of 1,694,188 grt, a decrease of 59,655 tons compared with the previous quarter and the lowest figure since June 1946. The highest post-war figure was 2,345,408 tons at the end of 1957. The total comprises 90 ships of 630,797 tons fitting out afloat, and 168 of 1,063,391 tons still to be launched. During the fourth quarter of 1960, 53 ships of 257,223 tons were begun; 67 of 376,222 tons were launched; and 57 of 322,653 tons were completed in Great Britain and Northern Ireland. Tonnage for which plans have been approved or material ordered, but which have not been started, had fallen steadily from 2,404,054 tons in June 1957, to 862,203 tons in December 1959. The present figure of 943,459 tons reflects a slight improvement in new orders, but much of the total is deferred for later delivery. Tonnage under construction in Great Britain and Northern Ireland for registration abroad at the end of December amounted to 36 ships of 312,823 tons, and represents 18.5 per cent of the total tonnage being built in this country. These figures compare very poorly with the peak reached in September 1950, but are an improvement on last quarter's 252,637 tons-14.4 per cent. Tonnage being built abroad for Great Britain and Northern

Oil Tankers Under Construction in the World

Coun	try of	Build	1	Vo.	Steam Tons Gross	No.	Motor Tons Gross	No.	Total Tons Gross
Great Brita	in and	North	ern						
Ireland	***	***	***	24	633,261	22	173,266	46	806,527
Other Br	icish	Commo	-80						
Countrie	\$		***	1	21,000	- 1	4,000	2	25,000
Argentina		***		_	_	1	1,500	- 1	1,500
Belgium	***			2	62,400	-	-	2	62,400
China (Nat	ionalis	(3)	Ver	_	_	2	4,800	2	4,800
Denmark		***	***	4	108,600	5	56,275	9	164,875
Finland	***	***		SEASON .	-	- 1	499	-	499
France	***	411	***	8	272,443	5	78.585	13	351,028
Germany (***	11	323,801	13	8,149	24	331,950
Greece	***			_	_	2	16,470	2	16,470
Italy		***		11	294,610	7	25,560	18	320,170
Japan	***		144	8	252,132	25	181,640	33	433,772
Netherland	s	*11	***	6	177,262	6	66,799	12	244,061
Norway		***	***	1	18,500	9	139,940	10	158,440
Poland	***	***	***	_	_	4	39,788	4	39,788
Portugal		***	***	2	23,560	2	1.690	4	25,250
Spain	***		***	2	43,000	7	63,595	9	106,595
Sweden				8	248,860	16	303,599	24	552,459
Turkey	***	***	***	_	_	2	1,020	2	1,020
United Stat			***	7	241,770	_		7	241,770
Yugoslavia	***	***	***	-	20,000	3	17,100	4	37,100
World Tota	al	***	***	96	2,741,199	133	1,184,275	229	3,925,474
							Control of the Control		

Ships Begun, Launched and Completed

Count	ry of	Build		No.	Begun Tons	No.	Tons	No.	ompleted Tons
					Gross		Gross		Gross
Great Britai	n an	d Northe	rn						
Ireland		ris		53	257,223	67	376,222	57	322,653
Other Bri	cish	Commo							
wealth Co		ies		5	1,340	8	42,614	8	13,096
Argentina			***	-		-	-	1	1,500
Belgium	***	***	***	4	850	5	17,816	5	30,723
Brazil	***	***		2	12,450	1	1,200	-	
Denmark		111	***	14	48,004	14	78,025	15	54,798
Egypt (U.A.				_		1	1,970	-	
Finland		***	***	6	14,245	9	23,207	18	33,194
France	***	*A*	***	17	170,865	17	191,012	14	147,574
Germany (V	Wase		***	66	232,742	65	261,465	70	248,212
Greece	ACSE		***	00	232,172	3	16,506	,0	236
	***	***	4.8.0	2	750	2	404	- 1	303
Indonesia	***	***	***	3		-	707		303
Irish Republ	1C	***	***	- 1	14,800	9	FA 453		127.010
Italy	***	***			22,250		59,453	16	137,068
Japan	***	***	***	134	462,728	146	365,623	173	487,577
Netherlands	5	***	215/2	41	154,520	42	116,152	51	180,702
Norway	888		ier	15	85,205	21	56,113	16	42,809
Poland	***	***	105	18	65,394	19	53,708	27	84,356
Portugal	***	***		2	7,500	6	20,280	1	1,810
Spain	***	***	888	23	29,835	22	52,512	25	35,498
Sweden	***	***	***	25	255,949	23	232,321	22	194,746
Turkey	***	***		- 1	600	2	1,150	1	760
United State	es of	America	***	1.6	105,180	15	123,245	12	134,307
Yugoslavia	81.6	***		7	48,550	7	38,850	3	34,011
World Tota	Is	***	***	452	1,990,980	504	2,129,848	538	2,185,933

Ireland has increased and now stands at 566,403 tons. Tankers total 46 ships of 806,527 grt, which is 27,173 tons less than the previous quarter, and represents 47.6 per cent of the total tonnage under construction.

Tonnage Building Abroad

Ships under construction at the end of December totalled 1,140 ships of 6,972,894 grt; a decrease of 84,679 tons since the previous quarter. As was then the case, no returns are available for China, East Germany and Russia. Tonnage being built abroad has been falling since September 1958, and is now 933,764 tons below the 7,906,658 tons then reported. Totals for the leading countries abroad, as compared with the previous quarter

		To	ns			Ton	s
Germany I Japan Sweden France Italy Netherland	ds	897,723 (+896,215 (+808,941 (+655,826 (+650,663 (+66,919 (+524,269 (+7524,260) (+7524,260) (+7524,260) (+7524,260) (+7524,260) (+752	5,149) - 25,322) - 59,111) - 25,263) - 115,524) - 22,517)	Denmark Poland Yugoslavia Belgium Canada Finland India	***	258,742 (- 256,099 (- 222,613 (+	8,653) (2,986) (2,970) (18,759) (380)
Norway Spain	***	357,678 (+ 279,359 (-	45,605)	Australia	***	59,438 (-	9,887)

Changes in the relative positions of the countries illustrate the uncertainties which face the shipbuilding industry as order books become more patchy, and Japan has surrendered to Germany by a very small margin the lead which she has held for the past two years. This is in tonnage under construction, however, and Japan has so far maintained a much higher output by a faster rate of construction.

Tonnage intended for registration elsewhere than in the country of build shows an increase of 45,178 tons to a present figure of 3,122,351 tons (44.8 per cent of the total under construction abroad).

Merchant Ships Under Construction in the World

	,		ng Ships o		otorships	tons		Percentage
Country of Build		No.	Tons Gross	No.	Tons Gross	No	. Gross	of World Tonnage
British		140.	Gruss	140.	0/033	140	. 01033	ronnage
Commonwea	leh-							
Great Britain								
N. Ireland	and	49	854,004	209	840,184	258	1,694,188	19.55
Australia		2	35,038	9	24,400	11	59,438	
	***	4	33,030	,	27,700	11	37,730	
Canada:		2	34,500	9	23,820	,		
Coast		7		2			67,520	2.25
Great Lakes		-	261	10	9,200	11	60,061	2.25
India	***	,	361	10	59,700	11	60,061	1
Commonwe	alth							
Countries	***	_	-	8	8,392	8	8,392	
Argentina	865	_		4	20,500	4	20,500	0.24
Belgium	488	3	85,400	14	68,619	17	154,019	1.78
Brazil			7,500	7	19,650	8	27,150	
China (Nation:	alisc)		date	2	4,800	2	4,800	
Denmark	***	5	117,600	30	141,142	35	258,742	
Egypt (U.A.R.		-	-	- 1	1,970	- 1	1,970	0.02
Finland	***	_	NAME OF THE PARTY OF	21	65,146	21	65,146	0.75
France		9	338,443	63	317,383	72	655,826	7.57
Germany (We	(32	15	369,843	149	527,880	164	897,723	10.36
Greece	***	-	-	6	17,495	6	17,495	0.20
Indonesia	***	-	_	13	3,244	13	3,244	0.04
Irish Republic		-	_	3	15,920	3	15,920	0.18
Israel	***	-	-	1	200	f	200	0.00
Italy		18	428,140	49	222,523	67	650,663	7.51
Japan	***	12	317,082	124	579,133	136	896,215	10.34
Mexico		manufacture.		1	500	- 1	500	0.01
Netherlands		8	209,262	120	407,657	128	616,919	7.12
Norway		2	36,900	56	320,778	58	357,678	4.13
Philippines	255	_	-	- 1	1,750	- 1	1,750	0.02
Poland	***	9	54,305	52	201,794	61	256,099	2.95
Portugal		3	24,560	11	9,000	14	33,560	0.39
Spain	***	6	57,942	101	221,417	107	279.359	3.22
Sweden	***	10	260,960	68	547,981	78	808,941	9.33
THE RESERVE OF THE PERSON NAMED IN COLUMN TWO IN COLUMN TO SHARE THE PERSON NAMED IN COLUMN TWO IN COLUMN TO SHARE THE PERSON NAMED IN COLUMN TWO IN COLUMN TO SHARE THE PERSON NAMED IN COLUMN TWO IN		3	1,550	11	4,632	14	6,182	0.07
U.S. of Americ	271		1,330		1,000		-11.00	
Atlantic Coas		17	338,334	8	2,675	7		
Gulf Ports		3	33,000	7	2,825	(*****	
Pacific Coast	***	13	142,200		2,023	> 55	524,269	6.05
	***	1.3	1.74,200	7	5,235	1		
Great Lakes	***	-	20,000	29	202,613	30	222,613	2.57
Yugoslavia	***	-	20,000	27		-		
World Total®	***	192	3,766,924	1,206	4,900,158	1,398	8,667,082	100.00

Returns are not available for China, East Germany and Russia

NEW CONTRACTS

				MEW	CON	TRAC	13			
Shipowners	No. of Ships	Type	Tons d.w. (gross)	Dimensions (ft.) L.b.p.(o.a.) × B. × D.(dft.)	Delivery	Speed (knots)	Propelling Machinery	Total	Engine Builders	Shipbuilders
					Overseas '	Yards				
Cobelar S.A.	(1392)	Bulk	21,400	-		-	Diesel	-	Burmeister & Wain	Jos. Boel & Fils
N. M. Paterson & Son	1	Bulk	15,260	-	-	_	Parsons geared turbine	-		Davie S.B. Co
A. P. Moller	2	Tankers	33,900	-	-	-	Diesel	-	-	Odense S.B. Co
Svenska Orient Linien	(160/162	Cargo	5,600	-	-	-	Diesel		Gotaverken	Wartsila-Koncernen A/B, Crichton-Vulcan
Sven Salen	(209)	Tanker	54,300	-	_	-	Geared	_	De Laval	Ch. Navals de la Ciotat
Louis Dreyfus	2	Bulk	22,500	****	-	_	Diesel	-	Gotaverken	Ch. Navals de la Ciotat
Sigval Bergesen	(213/14)	Carrier Cargo	4,360	-	-	1	Diesel	-	-	Ch. Navals de la Ciotat
Union Industrielle et	(210)	Cargo	10,000	-	-	-	Doxford diesel	-	Shipbuilders	Ch. et At. de Provence
Maritimes Nestor Shipping Co	(318)	Tanker	23,805	_	-	-	Turbo-electric	-		Blohm & Voss
German owners	(\$122)	Cargo	4,000	-	-	_	Diesel	-	M.A.N.	Paul Lindenau
Bernhard Schulte	1	Cargo	4,300	-	_	_	Diesel	_	M.A.N.	Jos. L. Meyer
Italian owner	(506)	Bulk	22,400	***	-	_	Fiat diesel	-	Shipbuilders	Cant. Riuniti dell'
Sanayama Kisen K.K.	(920)	Carriers	10,250 (7,150)	-	-	-	Sulzer diesel	-	Shipbuilders	Adriatico, Trieste Mitsubishi H.I. Reorg.
Osaka Shosen Kaisha	2	Cargo	12,100	-	-	18.2	Sulzer diesel	_	Shipbuilders	Mitsubishi H.I. Reorg.
Shin-Nihon Kinkai	(921/2)	Ore	(9,350) 21,140	-	_	_	Sulzer diesel	-	Shipbuilders	Mitsubishi H.I. Reorg.
Kaiun K.K. Nippon Yusen Kaisha	(923)	Carrier	(13,700)	-	_	-	U.E.C. diesel	-	Shipbuilders	Mitsubishi S.B. & E. Co
Daido Kaiun Kaisha	(1560)	Cargo	12,110	-	-	_	U.E.C. diesel	-	Shipbuilders	Nagasaki Mitsubishi S.B. & E. Co.
Taikeiyo K.K.	(1561)	Tanker	48,200	-	-	_	U.E.C. diesel	-	Shipbuilders	Nagasaki Mitsubishi S.B. & E. Co.
Mitsubishi K.K.	(1302)	Cargo	9,350	-	-	-	U.E.C. diesel	-	Shipbuilders	Nagasaki Mitsubishi S.B. & E. Co, Hiroshima
Mitsu Senpaku	1	Cargo	9,500	-	-	19	B & W diesel	_	Shipbuilders	Mitsui S.B. & E. Co
Toho Kaiun K. and Nittetsu Kisen K.	(165)	Bulk	18,800	-	_	_	M.A.N. diesel	_	Mitsubishi Yokohama	Nagoya S.B. Co
Towa Kisen K.	(166)	Cargo	6,500	_	-	_	B & W diesel		Hitachi S.B. & E. Co	Nagoya S.B. Co
Iudith Ann Liberian Transport Corp.	(167)	Cargo	14,800	-	1-	-	B & W diesel	-	Hitachi S.B. & E Co	Nagoya S.B. Co
Hakodate Fishery Co	(\$135)	Refrig. fishery vessel	9,200	-	-	-	Diesel	5,600		Sasebo Ship Industry Co
Mitsui Bussan II.	(254)	Chemical	3,650	-	1	-	Diesel	-	-	Shioyama Dock & E. Corp.
Harumi S.S. Co	(256)	Cargo	3,800	-	-	_	Diesel	_	_	Shioyama Dock & E. Corp.
Yacimientos Petroliferos Fiscales	1	Tanker	19,660	-	0000	-	Diesel	****	-	Astilleros y Talleres del Noroeste A.S.
Rederi A/S Atalanta	(460)	Ore carrier	15,200	-	-	_	M.A.N. diesel	-	Shipbuilders	Kockums M.V.
Standard Oil Co (New	(100)	Tanker	77,000	_	-	-	Geared	-	-	Kockums M.V.
Jersey) Standard Oil Co. (New	1	Tanker	77,000	_	_	_	Geared	-	-	Verolme United Shipyards
Jersey) Buries Markes	1	Bulk	22,500	-	1963	-	Sulzer diesel	9,000	-	Ch. Navals de la Ciotat

LAUNCHES

					A.s.	MONCHES					
Dd	te	Shipowners	Ship's Name and/or Yard No.	Туре	Tons d.w. (gross)	Dimensions (ft.) L.b.p.(o.a.) × B. × D.(dft.)	Speed (knots)	Propelling Machinery	Total h.p.	Engine Builders	Shipbuilders
				Yards	in Great	Britain and Norther	n Irelan	d			
Dec.	-	Explorator Ltd.	Roy Stevens	Trawler	(202)	-	-	Diesel	-	-	Richards Ironworks
Jan. Jan.	16	Donaldson Line Red Funnel Steamers	Letitia Thorness	Cargo Tug	6,500 (238)	385 × 58 × 35.33(23.5) 100(112.42) × 27 × (13.67)	16	Sulzer diesel Twscr. diesel	5,400 1,400	N.E. Marine Crossley Bros.	Hall Russell & Co John I. Thornycroft & Co
Jan.	17	South American Saint Line	St Rosario	Cargo	11,460	440 × 62.33 × 40.2(27.75)	15	4-cyl diesel	5,000	Wm. Doxford & Sons	Jos. L. Thompson & Sons
Jan.	17	Union Castle Line	Transvaal Castle	Pass.	(33,000)	756 × 90 × (32)	23	Pametrada geared turbines	40,000	Shipbuilders	John Brown & Co (Clydebank)
Jan.	17	I Irish Shipping	Irish Sycamore	Cargo	14,800	470 × 67 × 40.5(30)	15	6-cyl Doxford dies	6,800	Shipbuilders	Wm. Gray & Co
Jan.	10	BP Tanker Co	British Cormorant	Tanker	15,500	495 × 69 × 37 (27.5)	14.5	6-cyl B & W diesel	7,600	Shipbuilders	Harland & Wolff, Belfast
Jan.	1.0	Wilsons (N.Z.) Portland Cement	John Wilson	Bulk	1,750	246(268.5) × 42 × 18.5(19.75)	11.5	Diesel- electric	1,600	G.E.C./Belliss	Henry Robb
Jan.	19	Ashley Fishing Co	Juniper	Trawler	(250)		-	Diesel	660	Lister Blackstone	T. Mitchison
Jan.	19	Bracondene Fishing Co	Bracondene	Trawler	(215)	-	_	Diesel	-	_	John Lewis & Son
						Overseas Yards					
-	-	China Nav. Co	Kweilin (473)	Cargo	6,510	390 × 55.75 × 33.5(24)	14.25	Doxford diesel	4,450	Shipbuilders	Taikoo Dockyard
Dec.	-	Soc. Nazionale Metanodotti	Agip Venezia (1866)	Tanker	47,700 (29,500)	695(705) × 102 × 49.5(37.75)	17	Parsons geared turbine	17,300	Shipbuilders	Cant. Riuniti dell'Adriatico,
Dec.	-	U.S.S.R.	Metallurg Kurako	Cargo	22,100 displ.		-	Diesel	-	-	Kherson Shipyards, Ukraine
Dec.	-	U.S.S.R.	Rava Russkaya	Tanker	16,000	_	-	-	-	-	Kherson Shipyards, Ukraine
Dec.	2	National Development Corp	Philippine President Roxas (768)	Cargo	(9,500)	475.67 × 63.67 × 41 (30.95)	18.25	Sulzer diesel	12,000	Shipbuilders	Uraga Dock
Dec.	8	Vialogo Cia. Nav. S.A.	Apollonia (563)	Cargo	(10,300)	475.75 × 66.25 × 41.33(30.33)	18.25	6-cyl Sulzer diesel	9,000	Shipbuilders	Ishikawajima- Harima H.L., Aioi
Dec.	9	Shinto Kaiun K.K.	Toyo Maru No 5 (169)	Cargo	3,445 (2,464)	257.58 × 44 × 22.9(18.9)	13.25	B & W diesel	2,550	Mitsui S.B. & E. Co	Osaka S.B. Co

Dat	e	Shipowners	Ship's Name andfor Yard No.	Туре	Tons d.w.	Dimensions (ft.) L.b.p.(o.a.) × B. × D.(dft.)	Speed (knots)	Propelling Machinery	Total h.p.	Engine Builders	Shipbuilders
Dec.	14	Govt. of Indonesia	Gunung Kerintji (263)	Cargo pass.	5,000 (3,800)	-	15	Diesel	3,300	-	Hakodate Dock
Dec.	17	American Export Lines	Export Banner (324)	Cargo	12,800 (10,000)	470 × 73 × 42.2(27)	18.5	Geared	12,500	-	National Steel & S.B. Corp
Dec.	18	Spiosna Plovba	Bela Krajina (228)	Bulk	18,400	527.58 × 70.58 × (29.5)	15	B & W diesel	8,300	Shipbuilders	Brodogradiliste "Uljanik"
Dec.	19	Afran Transport Co	Tasman Sea (978)	Tanker	38,750 (24,700)	672.5 × 92.5 × 48.58(36.42)	17	Geared	16,500	Shipbuilders	Kawasaki Dockyard
Dec.	19	Soponata	Geres (51)	Tanker	27,000 (18,000)	600 × 82.5 × (32.2)	16	Parsons geared turbine	9,600	Cockerill- Ougree	Arsenal do Alfeite
Dec.	19	Canada S.S. Lines	(169)	Cargo	(6,000)	441.33 × 56 × 32(23.67)	17	Diesel	6,000	Fairbanks Morse	Collingwood Shipyards
Dec.		Terukuni Kaiun and Kure S.B. & E. Co	Sumiyoshi Maru (54)	Ore	(13,100)	524.9 × 74.1 × 40.5	13.6	M.A.N. diesel	7,000	Kawasaki Dockyard	Kure S.B. & E. Co
Dec.	23	Suez Canal Authority	Suez Canal (1)	Cargo	3,200 (1,970)	-		Diesel		-	Suez Canal Authority Shipyard, Port Fuad
Dec.	24	Hikawa Shoji Kaisha	Bihoro Maru (317)	Cargo	4,570 (3,100)	-	12.6	Diesel	2,800	-	Namura Shipyard
Dec.		Stoom, Mij, "De Maas" (Phs. von Ommeren)	Katendrecht (774)	Cargo	(8,000)	442.95 × 66.25 × (38.9)		M.A.N. diesel	7,800	Shipbuilders	Wilton-Fijenoord
Dec.	30	Wilh. Wilhelmsen, Oslo	Trianon (529)	Cargo	12,600 (7,161)	470×68×31.5(31.1)	19.5	10-cyl B & W diesel	12,500	Shipbuilders	Eriksbergs M.V.
Jan.	4	Fearnley & Eger	Ferngate (328)	Cargo	9,450 (7,500)	413.33 × 57.2 × (38.75)	16.5	Diesel	7,000	M.A.N.	Rheinstahl Nordseewerke
Jan.	5	Koctug Denizcilik Isletmesi A.S.	Bodrum (852)	Cargo	6,200 (4,450)	344.42 × 51.9 × 29.5	-	Diesel	-	M.A.N.	A. G. Weser, Bremerhaven
Jan.	5	Moore-McCormack Lines	Mormaclake (619)	Cargo	(9,207)	458 × 68 × 41.5(28.5)	18	Geared	11,000	G.E.C.	Sun S.B. Co
Jan.	7	A. G. Gefag	Rhin (154023)	Cargo	(6,660)	464.5(504.95) × 63.5 × 41.2(27.33)	16.25	6-cyl diesel	7,800	Sulzer Bros.	Stocznia Gdanska
Jan.	7	Sig. Bergesen & Co	Bergebonde (176)	Tanker	49,500 (31,000)	710×104×51.5(38.5)	15.5	Diesel	17,300	& Wain	Rosenberg M.V.
Jan.	10	Partenreederei "Constantia" (Chr. F. Ahrenkiel)	Constantia (816)	Cargo	16,750 (11,900)	462.5 × 70.33 × 42(32.2)	15	M.A.N. diesel	7,250	Shipbuilders	Blohm & Voss
Jan.	11	W. Bruns & Co	Brunsdeich (1121)	Cargo	3,400 (3,150)	397 × 51.9 × (20)	17	M.A.N. diesel	5,000	Shipbuilders	Kieler Howaldtswerke
Jan.	11	Fisser & Van Doornum	Hendrik Fisser (326)	Cargo	(10,500)	475.75 × 67 × (30)	14	Diesel	5,400	M.A.N.	Rheinstahl Nordseewerke
Jan.	11	Kon. Rotterdamsche Lloyd	Seine Lloyd (798)	Cargo	14,500 (11,500)	501.2(544.75) × 69.58 × 43.2(34)	18	6-cyl diesel	10,500	Sulzer Bros	C. van der Giesser & Zonen
Jan.	14	Associated Fisheries	Lord Nelson (298)	Trawler	(1,200)	220 × 35	15	Diesel	-	-	Rickmers Werft
Jan.	24	Lykes Bros S.S. Co	Solon Turman (4581)	Cargo	(10,200)	470(495) × 69 × 41.5(29.5)	17	Geared turbine	9,900	G.E.C.	Bethlehem- Sparrows Point

Shipowners	Ship's Name		1 1	Dimensions (ft.)	1	4			
	Yard No.	Type	Tons d.w. (gross)	L.b.p.(o.a.) × B. × D.(dft.)	Speed (knots)	Propelling Machinery	Total h.p.	Engine Builders	Shipbuilders
		Yards	in Great I	Britain and Norther	n Irelan	d			
ast Anglian Ice & Cold		Trawler	(137)	-	*****	Diesel	-	-	Richards Ironworks
l. S. Dalgliesh	Ravensworth (365)	Ore carrier	9,650 (7,150)	407 × 57 × 32.25(25.25)	11.25	3-cyl Doxford	2,600	N.E. Marine	Austin & Pickersgill
Sovt. of Barbados	Pelican (921)	Tug	(260)	96(105)×28 × (3.5(11.5)	10.5	Twscr.	1,016	National	W. J. Yarwood & Sons
sso Petroleum Co	Esso Ipswich (701)	Coastal	(1,060)	218×34.75	-	Diesel	930	English Electric	Jos. L. Thompson & Sons
Bermuda Board of Trade	Corona	Ferry	52		12.5	Two 8-cyl diesels	320	Gleniffer	Brooke Marine
Bermuda Board of Trade	Triton	Ferry	52	$(68.5) \times 16.5 \times 6.5(3.67)$	12.5	Two 8-cyl diesels	320	Gleniffer	Brooke Marine
Charter Shipping Co	Foyle (496)	Tanker	37,000 (25,000)	660(690) × 90 × 48(34.33)	16.5	Geared	16,000	Barclay Curle	Chas. Connell & Co
allum Shipping Co	Iron Crown	Ore	(11,000)	485 × 68.75 × 36.25	11.5	4-cyl Doxford diesel	4,400	Shipbuilders	Scott's S.B. & E. Co
och Fishing Co	Loch Eriboll	Trawler	(734)	176.25(197 ×32.25×16.5	13	8-cyl Werkspoor	1,450	J. D. Holmes	Brooke Marine
			0	verseas Yards		diesei			
OS Progress,	Olga Nielsen	Tanker	(13,000)	538 × 71.67 × 39.67(30.75)	15.5	Diesel	8,750	Burmeister & Wain	Jos. Boel & Fils
inska Angfartygs A B	Baltic (1082)	Cargo			13.5	6-cyl Sulzer diesel	2,400	Shipbuilders	Wartsila- Koncernen A/B, Crichton-Vulkan
JSSR.	Alapajevsk (1076)	Cargo	8,700 (5,513)	4275(457.33) × 57.75 × 38.1(25)	16	9-cyl Sulzer diesel	6,300	Shipbuilders	Wartsila- Koncernen A/B, Crichton-Vulkan
oc. Nazionale Metanodotti	Maina Morasso (1851)	Trawler	19,200 (12,500)	528.25 × 72.9 × 39.9(30.95)	16.5	Parsons geared	10,000	Shipbuilders	Cant Riuniti dell'Adriatico, Monfalcone
Curibayashi Shosen Kaisha	Shinsho Maru (800)	Cargo	4,500 (2,970)	305 × 47.42 × 24.5	11.75	Sulzer diesel	2,250	Uraga Dock	Ishikawajima- Harima H.I. Co, Tokyo
Texaco (Panama) Inc.	Texaco Hawaii (645)	Tanker	46,800 (26,300)	705 × 99 × 50.33(37.58)	16.5	Geared	19,000	Ishikawajima H.I.	Mitsui S.B. & E. Co
Jeno Unyu Shokai	Aokai Maru No I (158)	Tanker	3,100	262.5 × 42 × 21 (18.5)	11.75	M.A.N.	1,750	Mitsubishi	Nagoya S.B. Co
Canopus, Panama	Castor (134)	Cargo	(10,494)	480(516.33) × 64 × 41.9(27.5)	16	6-cyl Stork diesel	7,000	N.D.S.M.	Werf Gusto
J.S.S.R.	Frjanova (1013)	Cargo	3,100 (1,908)	284.33 × 45.95 × 26.95(18.58)	13.6	Sulzer diesel	2,400	Shipbuilders	Wartsila- Koncernen A/B, Crichton-Vulcan
lederi A/B Nordstjernan	Brasilia (1057)	Cargo	9,000 (8,495)	450(490.58) × 63 × 39.5(28)	19	Four Pielstick	12,000	Shipbuilders	Lindholmens Varv
Polish Ocean Lines	Ludwik Solski (154102)	Cargo	10,300	464.5(504.95) × 63.5 × 41.2(27.42)	16.25	6-cyl Sulzer	7,800	H. Cegielski	Stocznia Szczecinska
Laeisz	Pentelikon (779)	Refrig.	4,200	-	18	Diesel	7,250	M.A.N.	Deutsche Werft
Alfred C. Toepfer	Carl Trautwein	Car	(11,500)	475.75 × 69.5 × (30.5)	15	Fiat diesel	7,200	Borsig A.G.	Rheinstahl Nordseewerke
N. M. Paterson & Sons	New Quedoc (624)	Bulk carrier	(9,960)	590(604.58) × 62 × 33.9(23)	13	Geared turbine	4,400	Parsons Marine	Davie S.B. Co
	Storage Co. S. Dalgliesh ovt. of Barbados aso Petroleum Co ermuda Board of Trade frade harter Shipping Co allum Shipping Co och Fishing Co //S Progress, Copenhagen nska Angfartygs A/B IS S R. oc. Nazionale Metanodotti uribayashi Shosen Kaisha exaco (Panama) Inc. leno Unyu Shokai oc. Transoceanic Canopus, Panama S.S.R. ederi A/B Nordstjernan olish Ocean Lines Laeisx Iffed C. Toepfer	Storage Co. S. Dalgliesh S. Dalgliesh Ravensworth (365) Ravensworth	ast Anglian Ice & Cold Storage Co. S. Dalgliesh Avensworth (365) Ravensworth (365) Ravensworth (365) Rovensworth (365) R	ast Anglian Ice & Cold Storage Co. S. Dalgliesh (459) Ravensworth (365) Ore Carrier (7,150) Pelican (921) Tug (260) Soo Petroleum Co Esso Ipswich (701) Tug (260) Trade Germuda Board of Trade Germuda Board of Trade Parter Shipping Co Iron Crown Ore Ishing Ore Iron Crown Ore Ishing Ore Ishing Ore Iron Crown Ore Ishing Ore Ishing Ore Iron Crown Ore Ishing Ore Iron Crown Ore Ishing Ore Iron Crown Ore Ishing	Asst Anglian Ice & Cold Storage Co	Ast Anglian Ice & Cold Ast Anglian Ice & C	Asst Anglian Ice & Cold Storage Co Storage Co (459) Ravensworth (365) Ore (7,150) 32,25(25,25) Storage Co (459) Ore (7,150) 32,25(25,25) Storage Co (1,060) (1,0	Agrical Carrier Carr	American Ice & Cold Scorage Co. S. Dalgliesh Rovensworth (365) Ore 9,650 407 × 57 11.25 3-cyl 2,600 N.E. Marine Doxoford diesel Oxford

MARITIME NEWS IN BRIEF

Captain Duncan Campbell, who retired at the end of last year as Director of Royal Navy Fleet Maintenance at Bath, has been appointed planned maintenance adviser for P & O-Orient Lines, Planned maintenance is a system whereby the great majority of maintenance needs are planned, noted, recorded and interpreted in considerable detail. As a result, it is possible to judge more exactly the performance of any piece of machinery, to employ one's own maintenance staff to the best effect, to foresee in greater detail what help from shiprepairers may be needed, and when and where it can best be sought. Captain Campbell, who will rank as a superintendent with P & O-Orient Lines, has been in charge of the Royal Navy's planned maintenance for the past two years.

CAPTAIN C. O. TUCKER, who recently retired as superintendent of marine operations for the Kuwait Oil Company, has joined Polycell Products Ltd as a marine sales executive. Captain Tucker has been retained as marine adviser to the Kuwait Oil Company.

MR R. Shaw, Principal Surveyor on the North-East Coast for Lloyd's Register of Shipping, has died. He joined Lloyd's Register 32 years ago.

CAPTAIN W. V. T. PIKE, cargo superintendent for the Bristol Channel ports for Houlder Brothers Ltd. of Newport, Mon., has died.



MR LAWRENCE M. HUNTER has been elected president of the Lavino Shipping Co Ltd, of Philadelphia, Pa. Mr Hunter has spent many years in various executive positions within the shipping industry, and has been with Lavino for the past 27 years, the last period as executive vice-president. Mr Edwin M. Lavino has been elected chairman of the Lavino Shipping Company. The firm is a subsidiary of the E. J. Lavino Steel Company of America and acts as ships' agents in five American East coast ports

MR D. K. FRASER, joint managing director of G. A. Harvey & Co (London) Ltd, has been appointed managing director. Mr H. E. Cooper has relinquished his office of joint managing director but remains a director.

MR F. G. SLATER, until recently vice-president freight traffic, with American Export Lines, has joined Hellenic Lines Ltd as a director.

SIR CLIFFORD JARRETT has been appointed Secretary of the Admiralty in succession to Sir John Lang who will be retiring from the Admiralty service on March 31.

The Norwegian merchant fleet increased by 413,000 grt during 1960 and totalled 11,209,000 grt by the end of the year; 3,400,000 tons have been contracted for future delivery—1,270,000 tons to be taken over in 1961. Roughly one million tons is contracted from Norwegian yards and another million from Swedish builders. The Norwegian fleet is now 8.6 per cent of the total world tonnage. It earned for Norway £157,500,000 in foreign currency during 1960.

P. & A. CAMPBELL LTD., operators of the White Funnel Fleet in the Bristol Channel, may possibly operate a hovercraft as a cross-channel ferry, when one is suitably developed. The firm is in close contact with Saunders Roe Ltd, who are developing the SRN-2 hovercraft.

BEAUFORT (AIR-SEA) EQUIPMENT LTD are cooperating with a leading German liferaft manufacturer. The British firm will offer servicing facilities for German liferafts, and in Germany the German manufacturer will offer servicing facilities for

Beaufort rafts. Service stations in Germany are situated in Bremerhaven, Hamburg, Kiel and Rendsburg, and these will be operational from March 1. There are two further stations in the course of preparation situated at Emden and Wilhelmshaven, and these will be operational towards the end of 1961.

THE MEMBER LINES of the New Zealand Tonnage Committee, who are operating the present services to New Zealand from north Continental ports, have decided for the future to operate a joint service of ships at regular fortnightly intervals direct from the Continent to New Zealand.

Discussions have taken place between the Boilermakers Society (70,000 members) and the Ship Constructors & Shipwrights' Society (24,000 members) with the intention of bringing about closer working between the members of both organisations, and to eliminate demarcation disputes. Mr A. Williams, general secretary of the Ship Constructors, has described as "premature" reports that the two unions may be merged. He said his union was not opposed to amalgamation, but they would have to be sure that a merger would cut out demarcation disputes.

THE AILSA SHIPBUILDING CO LTD, Troon, has received local approval for a further stage of its £500,000 redevelopment plan. New plating shops are to be built which will be equipped with the most modern plate working machinery and will have an overhead travelling crane capable of handling loads between 5 and 15 tons. The plumbing, tinsmith and coppersmith shops will be demolished and replaced in line with the new fitting-out berth.

THE CONTRACT for the main propulsion steam turbines and condensers for Britain's second nuclear submarine has been awarded to the English Electric Co Ltd. The machinery will be built at the company's Rugby works. The submarine was recently ordered by the Admiralty from Vickers-Armstrongs (Shipbuilders) Ltd, Barrow.

BELSHIPS CO LTD has moved to Creechurch House, Creechurch Lane, London EC3 (tel: Avenue 4977/8 and 9618).

THE INSTITUTO NACIONAL DE CANALIZACIONES has stated that by July the principal channels of Lake Maracaibo will be dredged to a depth of 45ft and therefore will be navigable by tankers of up to 65,000 tons.

THE MINISTER OF POWER, the Rt Hon Richard Wood, will open the British Petroleum Company's new Angle Bay Ocean Terminal, Milford Haven, on April 20.

FIFTY YEARS AGO

From THE SHIPPING WORLD of 25 January 1911

The firm of Messrs. George Thompson & Co., of London, better known as the Aberdeen Line, recently launched at Belfast their new vessel, the *Themistocles*, which was built to their order by Messrs. Harland & Wolff. She is the fifth in size of all the vessels launched from British shipyards during 1910, and her registered tonnage is 11,232. The Themistocles left Belfast of the 14th inst. in command of Captain Douglas, the Commodore of the Aberdeen fleet. The Themistocles is a very handsome twin-screw steel steamer. She is 517 ft. overall, 62 ft. 3 in. beam, with a displacement of about 20,000 tons. The motive power is supplied by two sets of quadruple-expansion engines. She is designed for carrying great quantities of cargo, and her seven hatches are served by no less than 17 winches. The vessel is insulated for the carriage of frozen cargo of all kinds one speciality being chambers reserved for chilled meat. Two classes of passengers are carried-first and second. The Themistocles is the first ship ever built with single berth cabins for third-class passengers. The Aberdeen Line have even now on the stocks another vessel, the *Demosthenes*, which will soon be launched by Messrs. Harland & Wolff.

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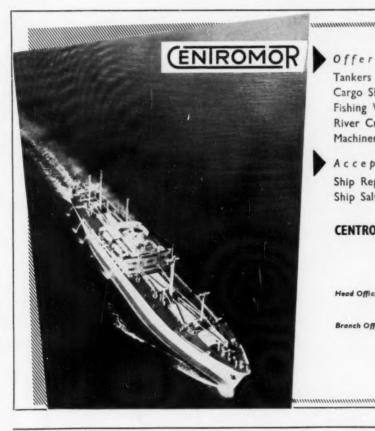
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5th January 1961

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